UNIVERSITY OF LONDON : INSTITUTE OF EDUCATION

(FACULTY OF SCIENCE)

SOCIAL COGNITIONS IN CHILDREN WITH EMOTIONAL AND BEHAVIOURAL PROBLEMS

Thesis submitted for the degree of Ph.D.

Gurmeet Mohinder Pal Singh

November, 1991

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ABSTRACT

The existence of emotional and behavioural problems in young children has been extensively documented. Such problems have a substantial impact on children themselves, their families, their schools, and society more generally.

A basic tenet of social cognitive psychology is that the way people think in their daily lives about themselves and their social world is linked with the way they behave. Based on this assumption, the main aim of this thesis was to explore whether and how children who show emotional and behavioural problems in the first year of primary school, differ from their non-problem peers in the way they think about themselves and their relationships with their mothers, teachers and peers.

Three studies were carried out. The first two dealt with the development of a standardised procedure for identifying emotional and behavioural problems in children in the first year of primary school. The third study endeavoured to explore social cognitions of the selected children. In the first study, 61 reception class teachers in London (England) evaluated three existing behaviour rating scales by providing assessments for children in their classes. One of these scales was further evaluated for use in India, in a normative study of 488 children. Using this measure, 210 children attending the first year in 26 primary schools were selected. Of these, 115 formed the target group- showing emotional and behavioural problems and the rest were their comparison children- free from reported problems but matched on gender within the same class. The children's social cognitions were examined in individual interviews. The measures used included the Harter Scale, Cassidy's Incomplete Stories With Doll Families and the Puppet Interview.

The children in the target group scored significantly lower than the comparison group on all the measures except the Puppet Interview, depicting a less positive view of themselves and their relationships with their mothers, teachers and peers. Follow up analyses indicated that the differences in the two groups were largely due to those children who showed internalising or multiple problems. Children showing predominantly externalising problems did not differ significantly from their comparisons. The findings add to the literature by showing that a meaningful link exists between young children's social cognitions and their behaviour in the classroom context.

To my parents and children

who have given me the experience of being a 'child' and a 'mother'

TABLE OF CONTENTS

Abstract		2
List of Tables		14
List of Figures		18
Acknowledgements		19
Preface		20
PART I:	**SELECTING YOUNG SCHOOL CHILDREN WITH EMOTIONAL AND BEHAVIOURAL PROBLEMS**	23
Chapter One:	**Identifying Emotional And Behavioural Problems In Young School Children**	
1.1	Introduction	25
1.2	Rationale for using teacher-based assessments of children's emotional and behavioural problems	31
1.2.1	Arguments against using teacher-based assessments of emotional and behavioural problems	34
1.3	The importance of obtaining standardised teacher-based assessments of emotional and behavioural problems	36
1.4	Methods for obtaining standardised assessments of children's emotional and behavioural problems from teachers	39
1.5	Screening Vs. Diagnostic assessment	43
1.6	Accuracy Of teacher-based rating scales in identifying emotional and behavioural problems	46
1.6.1	Reliability	46
1.6.2	Validity	49
1.7	Obtaining standardised teachers' assessments in the first year of primary schools	56

STUDY ONE

Chapter Two : Emotional And Behavioural Problems In Reception Class Children- A Study Of Convergence Between The CBQ, The PBCL And The TRF

2.1	Introduction	59
2.2	Overall aims of the study	60
2.2.1	Criteria to examine the suitability of the CBQ and PBCL	60
2.3	Location and time	61
2.4	Method	62
2.4.1	Instruments	62
2.4.1.1	The Child Behaviour Questionnaire (CBQ)	62
2.4.1.2	The Preschool Behaviour Checklist (PBCL)	64
2.4.1.3	The Teacher Report Form (TRF)	66
2.4.2	Design of the study	69
2.4.3	Procedure for contacting the teachers	70
2.4.4	Procedure for obtaining the assessments and sample	71
2.4.5	Scoring and analysis	74
2.5	Results	74
2.5.1	Preliminary findings	74
2.5.2	Distribution of scores and prevalence of emotional and behavioural problems	75
2.5.3	Factor structures of CBQ, PBCL and TRF	77
2.5.4	CBQ, PBCL and TRF factors- Their internal consistency and gender differences	86
2.5.5	Reliability of the CBQ, PBCL and TRF	88
2.5.6	Convergence of the TRF with CBQ and PBCL	92
2.5.7	Agreement of the CBQ, PBCL and TRF with teachers' independent judgements	96

2.5.8 Efficiency of the CBQ and the PBCL at alternative cut-off scores 103

2.6 Discussion 107

2.7 Implications of the findings 124

STUDY TWO

Chapter Three: Evaluation of the Preschool Behavioural Checklist for use in the first year of primary schools in Ludhiana, India

3.1 Introduction 125

3.2 Criteria for evaluation 125

3.3 Location and time 126

3.4 The first year of school in Ludhiana, India 128

3.5 Method 128

3.5.1 Translation and modification of the Preschool Behaviour Checklist 128

3.5.2 Procedure for contacting teachers and getting the PBCL completed 129

3.5.3 Sample 131

3.5.4 Scoring and analyses 131

3.6 Results 132

3.6.1 Distribution of scores 132

3.6.2 Factor structure 132

3.6.3 PBCL factors' internal consistency and gender differences in mean scores 143

3.6.4 Internal consistency of the PBCL 143

3.6.5 Prevalence rates for emotional and behavioural problems 146

3.6.6 Agreement between independent judgements made by Indian teachers and the measures obtained from the use of the PBCL 146

3.6.7 Efficiency of the PBCL in India at alternative cut-offs 149

3.7 Discussion 153

3.8 Implications of the findings 162

Chapter Four: The Use Of The PBCL For Selecting Children With Emotional And Problems

4.1 Introduction 163

4.2 Selection of children 163

4.2.1 Criteria for selecting children 163

4.2.2 Procedure for selecting the children 164

4.3 Division of the target group into subgroups 169

PART- II: SOCIAL COGNITIONS IN CHILDREN WITH EMOTIONAL AND BEHAVIOURAL PROBLEMS 172

Chapter Five: Relationship between social cognitions and emotional and behavioural problems

5.1 What is social cognition? 174

5.2 What is the relationship between social cognitions and emotional and behavioural problems 175

5.2.1 Social-cognitive skills and emotional and behavioural problems 177

5.2.1.1 Role-taking skills 178

5.2.1.2 Empathy 180

5.2.1.3 Social problem solving 181

5.2.2 Social information processing and emotional and behavioural problems 183

5.3. THE PRESENT FOCUS 186

Chapter Six: Exploring Social Cognitions In Young Children

6.1 The view of the self 195

6.1.1 Introduction 195

6.1.2 Brief historical perspectives 196

6.1.3 Contemporary models of the self-concept 200

6.1.4 Different methods of measuring the view of the self 205

6.1.5 Existing instruments to measure the self-concept 208

6.2 The view of the relationships with mothers, teachers, peers 214

6.2.1 Existing instruments for assessing children's view of their relationships with their mothers, teachers and peers 216

Chapter Seven: Adapting Instruments For Exploring Social Cognitions For Use In The Present Research 219

7.1 The pictorial scale of Perceived Competence and Social Acceptance for young children 220

7.1.1 General description 220

7.1.2 Recommended procedure for administering the Harter Scales 221

7.1.3 Translation and modifications of the Harter Scales 224

7.1.4 Addition of a teacher acceptance subscale to the Harter Scale 227

7.2 Incomplete Stories With Doll Families 227

7.2.1 General description 227

7.2.2 Cassidy's recommended procedure for administering the Stories Task 231

7.2.3 Incomplete story themes 232

7.2.4 Translation and modifications of Incomplete Doll Stories Task 234

7.2.5 Cassidy's recommended scoring system for the Stories Task 236

7.2.5.1 Recommended scoring system for the Present story (mother related) 236

7.2.6 Difficulties in following Cassidy's scoring system for Incomplete Doll Stories Task 237

7.2.7 Revised system to score the Present Story 240

7.3 Addition of teacher and peer related incomplete stories 241

7.4 The Puppet Interview 242

7.4.1 Questions in the Puppet Interview 243

7.4.2 Cassidy's procedure for administering the Puppet Interview 244

7.4.3 Translation and modifications of the Puppet Interview 244

7.4.4 Scoring system for the Puppet Interview 246

7.4.4.1 Cassidy's recommended system for scoring the Puppet Interview 246

7.4.4.2 Difficulties encountered in following Cassidy's scoring system and the revised system for scoring the Puppet Interviews 248

7.5 The Intelligence Scale For Indian Children 250

7.6 Piloting of the instruments and training 251

7.6.1 Piloting of the instruments 251

7.6.2 Training of interviewers 252

STUDY THREE

Chapter Eight: The View Of Self And Of Relationship With Mothers, Teachers And Peers In Children With Emotional And Behavioural Problems

8.1 Aims and hypotheses 254

8.2 Location and time 255

8.3 Method 256

8.3.1 Sample 256

8.3.2 Instruments 256

8.3.3 Procedure followed in exploring social cognitions 256

8.3.4 The order of administering the instruments 259

8.3.5 Procedure for recording the children's responses 260

8.3.6 Transcribing of the audio recorded responses 260

8.3.7 Scoring of the Incomplete Stories Task, Puppet Interview, Harter Scale and MISIC 260

8.4 Results 262

8.4.1 Introduction 262

8.4.2 The Harter Scale 262

8.4.2.1 Effect of gender on Harter scale scores 263

8.4.2.2 Correlation of scores in Harter Scale with IQ 263

8.4.2.3 Effect of children's problem status on Harter Scale scores 267

8.4.2.4 Intercorrelations between subscales of the Harter Scale 269

8.4.2.5 Effect of type of problems on Harter Scale scores 272

8.4.3 Incomplete Doll Stories Task 274

8.4.3.1 Effect of gender on scores in the Stories Task 275

8.4.3.2 Correlation of IQ with the scores in the Stories Task 275

8.4.3.3 Effect of the problem status on scores in the Stories Task 278

8.4.3.4 Intercorrelation between different aspects of the Stories Task 278

8.4.3.5 Effect of types of problems on scores in the Stories Task 281

8.4.4 The Puppet Interview 284

8.4.4.1 Effect of gender on the Puppet Interview scores 284

8.4.4.2 Correlation of IQ with the Puppet Interview scores 286

8.4.4.3 Effect of the children's problem status on their Puppet Interview scores and the Puppet Interview 286

8.4.5 Intercorrelations among the Harter Scale, Incomplete Doll Stories Task and the Puppet Interview 286

Chapter Nine: Discussion Of The Findings Of Study Three 289

9.1 General properties of the instruments 290

9.1.1 Harter Scales 290

9.1.2 Incomplete Doll Stories Task and the Puppet Interview 291

9.2 Differences in the way children with emotional and behavioural problems and their comparisons thought about 292

themselves and their relationships.

9.2.1 Harter Scales 292

9.2.2 Incomplete Doll Stories Task 294

9.3 Children with internalising, externalising, multiple and no emotional and behavioural problems- differences in the way they thought about themselves and their relationships 297

9.3.1 Harter Scales and Incomplete Doll Stories Task 297

9.4 The Puppet Interview 301

9.5 Intercorrelations among the Harter Scales, the Incomplete Doll Stories Task and the Puppet Interview 304

9.6 General Discussion 306

9.6.1 Why do children with internalising and multiple problems view themselves and their social relationships less positively than non-problem children? 307

9.6.2 Why do children with externalising problems score as positively as those children who do not show emotional and behavioural problems? 310

9.6.3 Some general points 315

9.6.3.1 Implications for assessment of emotional and behavioural problems in children 315

9.6.3.2 Implications for assessment of social cognitions in children with emotional and behavioural problems 317

OVERVIEW 318

References 321

Appendices 342

Appendix 1 : The Instruments used In Study One 343

1.1 The Child Behaviour Questionnaire (CBQ) 344

1.2 The Preschool Behaviour Checklist (PBCL) 346

1.3 The Teacher Report Form (TRF) 350

1.4 The original PBCL factors found in McGuire and Richman (1986) 354

1.5 The original TRF factors found in Achenbach and Edelbrock (1986) 355

1.6 The CBQ factors found in McGee et al. (1985) 359

1.7 The PBCL factors identified in Jackson (1989) 359

Appendix 2 : Letters To Teachers In London (England) for Study One 360

2.1 Letter to headteachers 361

2.2 Letter to reception classteachers inviting them to participate 362

2.3 Reply form completed by London teachers 363

2.4 Feedback sent to teachers on children's scores 364

2.5 Instructions for completing the first set of the assessments 365

2.6 Instructions for completing the second set of the assessments 366

Appendix 3 : CBQ, PBCL and TRF analyses regarding order effects 367

Appendix 4 : The Preschool Behaviour Checklist: Retranslated from Punjabi to English to check correspondence of meanings with the original English version 368

Appendix 5 : The Revised Preschool Behaviour Checklist used in Study Two 372

Appendix 6 : Letters To Teachers In Ludhiana for Study Two 376

6.1 Letter to headteacher 377

6.2 Letter to classteachers 378

6.3 Reply form used by Indian teachers 379

6.4 Instruction for completing the assessments 380

Appendix 7: The Adapted Harter Scale 381

7.1 Redrawn and original sketches 382

7.2 Punjabi version of the adapted Harter scale items 406

Appendix 8 : Incomplete Doll Stories Task 416

8.1 Cassidy's original scoring system for mother related stories 417

8.2 Revised scoring system for the mother related stories 423

8.3 Teacher and peer related stories- setting, instructions & the themes 426

8.4 Scoring system for the teacher and peer related stories 430

8.5 Photograph of the materials used to carry out the mother related stories 438

8.6 Photograph of the materials used to carry out teacher related stories 439

8.7 Photograph of the materials used to carry out the peer related stories 440

8.8 Punjabi version of the mother, teacher and peer related stories- Setting, instructions and themes 441

Appendix 9 : The Puppet Interview 446

9.1 Photographs of the elephant glove puppet 447

9.2 Panjabi version of the Puppet Interview questions 448

LIST OF TABLES

1.	Mean correlation between informants from Achenbach, McConaughy & Howell (1987)	48
2.	Sets of CBQs, PBCLs and TRFs sent to and completed by teachers	72
3.	Number of children for whom CBQs, PBCLs and TRFs were analysed	73
4.	Distribution of scores on CBQ, PBCL and TRF	76
5.	TRF items omitted from its factor analysis	78
6.	Factor names, their eigenvalues and the percent of variance accounted for by each factor in CBQ, PBCL and TRF	80
7.	Factor loadings of the Child Behaviour Questionnaire	81
8.	Factor loadings of the Preschool Behaviour Checklist	82
9.	Factor loadings of the Teacher Report Form	83
10.	A summary of the items loading on each of the factors on the CBQ, TRF and the PBCL	84
11.	CBQ, PBCL and TRF factors- internal consistency and gender differences	87
12.	CBQ items- their correlation with total scores and ability to distinguish between problem and non-problem groups based on cut-off score of 9	89
13.	PBCL items- their correlation with total scores and ability to distinguish between problem and non-problem groups based on cut-off scores of 12	90
14.	TRF items- their correlation with total score and ability to distinguish between problem and non-problem groups based on cut-off scores	91
15.	Correlation of the TRF factors with the CBQ and the PBCL factors	94
16.	Agreement of TRF with CBQ and PBCL in selecting children below and above cut-off	95
17.	CBQ, PBCL and TRF mean scores- differences in groups designated by teachers as definite, possible and non-problem	97

18.	CBQ items distinguishing between problem and non-problem groups based on teachers' judgements	99
19.	PBCL items distinguishing between problem and non-problem groups based on teachers' judgements	100
20.	TRF items distinguishing between problem and non-problem groups based on teachers' judgements	101
21.	Agreement of teachers with CBQ, PBCL and TRF in designating children above or below cut-off score	102
22.	Sensitivity and specificity of CBQ, PBCL and TRF with teachers' judgement as the criterion measure	106
23.	Similarity of the PBCL factors found in Study One, McGuire and Richman (1986) and Jackson (1989)	109
24.	Similarity of the CBQ factors found in Study One and McGee et al. (1985)	111
25.	Similarity of the TRF factors found in Study One and Achenbach and Edelbrock (1986)	114
26.	Distribution of scores of Indian and London children on PBCL	133
27.	PBCL factors- names, internal consistency and percent of variance in Indian and London data	134
28.	Factor loadings of the PBCL used on Indian children	135
29.	Comparison of PBCL factors found in India and in London- Study One	137
30.	Comparison of PBCL factors found in India and in McGuire and Richman's original study	140
31.	Comaprison of PBCL factors found in India and Jackson study	141
32.	Gender differences in factor means of PBCL in Indian and London data	144
33.	PBCL items- their correlation with total scores and ability to distinguish between problem and non-problem groups based on cut-off of 12 in	145

India

34. Prevalence rate of emotional and behavioural problems in Indian and London children at PBCL cut-off score of 12 — 147

35. PBCL means- differences in groups designated by Indian and London teachers as definite, possible and non-problem — 147

36. PBCL items distinguishing between problem and non-problem groups based on Indian teachers' judgements — 148

37. Sensitivity and specificty of the PBCL at different cut-off points in India and London — 152

38. Comparison of PBCL factors across three London studies and an Indian study — 158

39. Replication of PBCL factors across the Indian study, Study One, McGuire and Richman's and Jackson's studies — 159

40. Comparison of two broad subscales found in the Indian study across Study One, McGuire & Richman's and Jackson's studies — 161

41. False positives and false negatives in study two and later nominations — 166

42. Target and comparison group memebers who could not be contacted during Study Three — 167

43. Mean PBCL score of target and comparison groups (sampled from Study Two and later — 168

44. Distribution of scores of selected children on externalising and internalising subscales of the PBCL — 171

45. Inter-rater agreements for scoring of Incomplete Doll Stories Task — 261

46. Item means for Harter scales in this study and those found by Harter and Pike (1984) — 264

47. Internal consistency of Harter scales in this study and in Harter & Pike (1984) — 265

48.	Mean scores of boys and girls in the Harter scale	265
49.	Correlation of Harter scales with verbal IQ in comparison and target groups	266
50.	Mean scores of comparison and target groups in Harter Scales	266
51.	Items of competence domain in Harter scales that differentiated between comaprison and target groups	268
52.	Items of social acceptance subscale in Harter scale that differentiated between comparison and target groups	270
53.	Intercorrelation of Harter subscales in comparison and target groups	271
54.	Mean scores of children with different types of problems in the Harter Scales	273
55.	Internal consistency of Incomplete Doll Stories task	276
56.	Mean scores of boys and girls in Incomplete Doll Stories Task	276
57.	Correlation of Incomplete Doll Stories task with verbal IQ for comparison and target groups	277
58.	Mean scores of target and comparison group children on Incomplete Doll Stories Task	277
59.	Stories differentiating between comparison and target groups	279
60.	Intercorrelation of mother, teacher and peer related stories	280
61.	Mean scores of children with different types of problems on Incomplete Doll Stories Task	282
62.	Stories differentiating between children with different types of emotional and behavioural problems	283
63.	Mean score of children in the Puppet Interview	285
64.	Mean score of children with different types of problems	285
65.	Intercorrelation of the Harter Scales, Incomplete Doll Stories Task and the Puppet Interview	287
66.	Differences in verbal IQ of children	309

LIST OF FIGURES

1	Receiver Operating Characteristic (ROC) analysis curve drawn from the PBCL data	104
2	Receiver Operating Characteristic (ROC) analysis curve drawn from the CBQ data	104
3	Location of Ludhiana in India	127
4	Reciver Operating Characteristic (ROC) analysis curve drawn form the Indian PBCL data.	150
5	Item 8 from the Harter scale	223
6	A redrawn sketch from the Harter scale	225
7	Sketches for the teacher acceptance subscale	228
8	Distribution of sample according to subgroups	257
9	Mean scores of children with different types of problems on Incomplete Doll Stories Task	299
10	Mean scores of children with different types of problems in perceived competence and social acceptance	300

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Preface

Past research has shown that emotional and behavioural problems shown by young children tend to continue to later years in a sizable number. They are detrimental to children themselves, to those who deal with them in their everyday lives and to society more generally. It therefore seems important to pay early attention to children who show such problems. The first year of primary school is the earliest setting in many countries when all children come under regular daily scrutiny by trained professional staff. Hence, it provides an appropriate context for identifying and helping children who show emotional and behavioural problems.

The main aim of the thesis was to explore whether and how children who show emotional and behavioural problems in the first year of Indian primary schools differ from those who do not show such problems, in the way they think about themselves and their relationships with their mothers, teachers and peers.

Recently, the use of standardised procedures to identify emotional and behavioural problems shown by children has been emphasised. Currently, no instruments standardised for use in the first year of primary school are available. Two existing behaviour rating scales designed for contexts other than the first year of primary school, were evaluated to examine their usefulness for identifying children's emotional and behavioural problems in the first year of primary schools. Two studies were carried out for this purpose. On the basis of these two studies, one instrument was used for selecting children who show emotional and behavioural problems in the Indian primary schools. Their social cognitions were then examined in a third study.

The thesis is divided into two parts. The first part includes four chapters on selecting young school children who show emotional and behavioural problems and the second part focuses on their social cognitions.

Part-I

For research efforts to be fruitful in the long run, decisions regarding the context where the problems are identified and the person who identifies these problems are of utmost importance. Chapter One describes the reasons for choosing the first year of primary school as the context and explains the rationale for using teacher-based assessments for selecting children who show emotional and behavioural problems. The literature on the accuracy of teacher based assessments is also reviewed.

Chapter Two recounts one of the two studies (Study One) carried out to evaluate existing instruments for identifying emotional and behavioural problems. In this study the widely used Child Behaviour Questionnaire (Rutter, 1967) was compared with the recently developed Preschool Behaviour Checklist (McGuire and Richman, 1988) with the Teacher Report Form (Achenbach and Edelbrock, 1986) serving as a standard reference point between the two. The aims, method, findings and discussion of this study are presented in this chapter. Since these instruments were being used in the first year of primary school for the first time, this study was carried out in London, Britain where the instruments were originally developed.

Chapter Three includes the second study in which the Preschool Behaviour Checklist (selected on the basis of the findings of the first study) was scrutinised further in Ludhiana, India to assess its suitability for selecting children with emotional and behavioural problems in the first year of Indian primary school. The aims, method, findings and discussion of this study are presented in this chapter.

Chapter Four describes how the Preschool Behaviour Checklist was used to select a sample of children who demonstrated emotional and behavioural problems and their matched comparisons, in order to explore their social cognitions. The chapter also describes the way the Preschool Behaviour Checklist was used to divide the group of children who showed

emotional and behavioural problems into subgroups of children showing different types of emotional and behavioural problems.

Part-II

Chapter Five outlines the relationship between social cognitions and emotional and behavioural problems, the past efforts to explore this relationship and the focus of the present study. Chapter Six discusses the conceptual and methodological considerations of research into social cognitions.

Chapter Seven is about adapting the instruments used to explore the social cognitions in the present research. These instruments were new and had not been used in India. Therefore, they needed to be translated and adapted to the Indian situation, together with addition of some new elements to these measures. This chapter includes the description of the original measures, their revision and the addition of new elements to the original measures.

Chapter Eight is about the method and the findings of Study Three, carried out to explore the differences in social cognitions of children who demonstrated emotional and behavioural problems and their comparison children. Chapter Nine presents a discussion of the findings. The thesis concludes with an overview of the entire work.

PART- I : SELECTING YOUNG SCHOOL CHILDREN WITH EMOTIONAL AND BEHAVIOURAL PROBLEMS

Unfulfilled lives cost us twice- once in the loss of human resources, in the apathetic, unhappy, frustrated and violent souls in our midst; and again in the loss of productivity to our society, and the economic costs of dependency.

(Joint commission on the mental health of children, 1973).

CHAPTER ONE

Identifying Emotional And Behavioural Problems In Young School Children

1.1 Introduction

Most children do well in following the social norms of behaviour. They understand the accepted behavioural limits and are willing to follow them. They can deal with their feelings appropriately and develop the adaptive skills necessary for everyday living in society. In a school classroom, for instance, they are able to concentrate on what is being taught and can learn actively. They get along well with their classmates and are able to cope with the demands made on them by their teachers, peers and the school environment more generally. However, some of them do not do so well. They show behaviours or symptoms that are socially unacceptable. They may fight with the other children, interfere with their work, or disobey their teachers, or in contrast, they may be isolated from the other children and may not be able handle their feelings in socially desirable ways. When such behaviours occur frequently or persist to the extent that they are harmful to the children themselves or to the others dealing with them in their everyday lives, they are broadly referred to as emotional and or behavioural problems.

There is reliable evidence from research studies in various countries that- depending upon the criteria used-some 7 to 20% of children show emotional and behavioural problems (Rutter, Tizard & Whitmore, 1970 and; Rutter, Cox, Tupling, Berger & Yule, 1975*a* in England; Bhatia, Nigam, Bohra & Malik, 1991 and; Jiloha & Murthy, 1981 in India; McGee & Silva, 1982 in New Zealand; Achenbach & Edelbrock, 1981 in

America; Luk, Leung & Lee, 1988 in Hong Kong; Yu-feng, Yu-cun, Bo-mei, Mei-Xiang & Lin, 1989 in China).

Significant progress has been made in the past decade regarding the nature and assessment of these problems. Broadly speaking two types of problems, *externalising*- undercontrolled (behaviours such as, disobedience, fighting) and *internalising* - overcontrolled (behaviours such as being withdrawn, nervous, fearful) have been identified. Many studies have indicated that the behaviour problems shown by children at younger ages tend to continue in a considerable number of children into later years. For instance, Richman, Graham and Stevenson (1982) followed a sample of three year olds identified as having emotional and behavioural problems. When assessed at eight years of age, 61% of them showed difficulties in the clinical range. The nature of the problems also continued to be the same. Those who were initially fearful and unhappy later showed internalising problems, whereas those who were restless and difficult to control continued to be antisocial. Similarly Egeland, Kalkoske, Gottesman and Erickson (1990) from a longitudinal study reported that 80% of their 'acting out' and 71% of their 'withdrawn' preschoolers continued to show the same types of difficulties up to the first three years at school. Similar findings on continuity of the problems have been reported by many other studies (Campbell & Ewing, 1990; Robins, 1991; Fischer, Rolf, Hasazi & Cummings, 1984; McGee & Silva, 1982).

Emotional and behavioural problems have also been found to be a factor in children's poor social and cognitive competence. For instance, McGee, Williams, Share, Anderson and Silva (1986) have shown that behavioural problems interfered with children's reading ability and Blechman, Tinsley, Carella and McEnroe (1985) found low academic performance to be strongly associated with behavioural problems. Many

studies have documented poor peer social relations in children with emotional and behavioural problems (Parker & Asher, 1987 for a review; Campbell & Cluss, 1982; Campbell & Paulauskas, 1979). Apart from the immediate adverse effects, follow- up studies of children with antisocial behaviour indicate that as adults, they contribute disproportionately to the incidence of alcoholism, accidents, chronic unemployment, divorce, physical and psychiatric illnesses, demands on welfare services and intergenerational continuity of behavioural problems (Caspi, Elder & Bem, 1987; Robins, 1991). Estimates from the United States indicate that one billion dollars per year are spent on maintaining their juvenile justice system and the yearly cost of their school vandalism alone is half a billion dollars (Patterson, DeBaryshe & Ramsey, 1989). In 1986, their Federal Bureau of Investigation (1987) reported that more than 1.4 million juveniles were arrested for nonindex crimes (e.g., vandalism, drug abuse, or running away) and almost 900,000 for index crimes (e.g., larceny-theft, robbery, or rape). Other things being equal, these costs and statistics may be similar for many other countries.

Put together, the evidence regarding the prevalence, stability and poor outcomes of emotional and behavioural problems for children themselves, their families and society more generally, suggest that these problems deserve early attention. Efforts to intervene for problems during later years (for example, with antisocial adolescents) have generally lead to short-term effects which are lost within a year or two of intervention (Kazdin, 1987 for review; Wilson & Herrnstein, 1985). However, interventions at younger ages have been found to be more successful (Kazdin, 1987) and outcomes in general are better for those who are offered some intervention than those who are left untreated (Casey & Berman, 1985). These findings underscore the

need to identify emotional and behavioural problems in children at an early stage, so that timely help may be rendered.

Under the current statutory provisions, the first year of primary schools is the earliest setting in most countries wherein all children come under daily scrutiny by professional staff. It therefore provides an outstanding opportunity for identifying and helping children with emotional and behavioural problems. The entry to primary school, as such, represents a period of major ecological transition in children's lives (Ladd & Price, 1987; Alexander & Entwiste, 1986). During the period of this transition, children have to cope with new demands and perform new roles. They have to adjust to a special kind of environment, learn teacher expectations and gain acceptance into a new group of peers (Holland, Kaplan & Davis, 1974). They must also come to terms with the intellectual, linguistic and behavioural requirements of the school classroom. Past research suggests that the success with which children make this transition varies across children (Levine, 1966) and forecasts later social and school adjustment.

In their study on 260 children from 13 schools, Hughes, Pinkerton and Plewis (1979) found that 13% of children were rated by their teachers as generally having difficulty coping with school at the time of school entry. According to teachers, most of these children showed problems such as being unhappy, finding it difficult to settle at things, being disruptive, having tantrums, and victimising or being victimised by other children. In a follow-up after 18 months, they found a quarter to over a half of the children to persist in showing the problems. Other researchers have shown that outcomes such as peer rejection at school entry, for example, may persist over many years and maintain or contribute to adjustment problems in future settings (Coie & Dodge, 1983). For these reasons, the aim of focusing on children who show emotional and

behavioural problems in the first year of school seems to be particularly fitting, although it has not received much attention in many previous studies. Alexander and Entwiste (1986) assert,

> "There is good reason to think that how children make the transition to full-time schooling will have implications both profound and long lasting- whether the children are white or black... Despite the obvious importance of understanding why youngsters fare well or poorly at the point of school entry, there is a peculiar blindness to focus on this period" (p.3).

There are several other reasons why schools are an appropriate place for reaching children who display emotional and behavioural problems:

1. Schools are an important social context in our society (Minuchin & Shapiro, 1983 for review) and children spend a good part of their time in schools. The social skills learnt at school have a lasting impact on adaptive functioning in later years. As Good and Weinstein (1986) state, "School is a place where children develop or fail to develop a variety of competencies that come to define self and ability, where friendships with peers are nurtured, and where the role of the community member is played out, all during a highly formative period of development" (p.1095). Schools therefore have a responsibility towards development of emotional, social and moral capacities along with intellectual gains (Linney & Seidmann, 1989; Apter, 1982) and striving to reach children who show emotional and behavioural problems in schools corresponds with school goals and policies.

2. It is well recognised that a wide variety of problematic behaviours may have roots in a child's school experience, and some may be exacerbated in the school setting

(e.g., hyperactive behaviour). Alleviating such problems within the school context is therefore appropriate and desirable.

3. It is also known that some children may show emotional and behavioural problems for the first time in schools and may not show them elsewhere. It is only within the school setting that these children can be identified.

4. Some children in schools might come from families with marital disharmony, others might have parents who are maltreating, or physically and sexually abusive to them. These children are at increased risk for developing emotional and behavioural problems (Jenkins and Smith, 1991; Ciccheti, 1989; Mrazek, 1983). Efforts to help such children at home are often met with parental resistance and lack of cooperation. Receiving help at school may go some way in helping such children.

5. Parents and children are familiar with the school setting and may find it easier to participate in school-based programs that are designed to help children with emotional and behavioural problems (Hobbs, 1975).

7. For researchers, particularly developmental psychologists, schools provide a cost-effective means of access to cross- sections of children at different ages. Since most children are likely to continue in the same school, it is possible to carry out follow up studies.

One obvious argument against a focus on school assessment of emotional and behavioural problems is that schools represent a special environment. It is well established that some children who show problems at school do not do so at home,

while others show them at home, and still others show them pervasively, across both contexts (Verhulst & Akkerhuis, 1989; Loeber, Green, Lahey & Southamer-Loeber, 1989; and Achenbach, McConaughy & Howell, 1987*a*). It follows that some children (that is, those who are seen as having problems at home by their parents) will be missed by a school-based approach. This argument is an important one and will affect the generalizations which can be drawn from classroom findings. It is not, however, an overriding argument. If the problems were to be identified at home with the help of parents, those showing problems at school would be left out. So far as social behaviour is context-specific (and there is strong evidence for the importance of contextual variables, e.g., Achenbach, McConaughy & Howell, 1987) any assessment must take this into account. The value of classroom assessments stem both from pragmatic considerations and from the fact that school plays such a central role as an environment for children's development.

1.2 Rationale for using teacher-based assessments of children's emotional and behavioural problems

Young children rarely report their own emotional and behavioural difficulties. Instead, the adults dealing with them in their daily lives are the ones who notice their problems and get concerned about them. Since behaviours termed as 'problems' differ mainly in frequency, intensity or degree, from behaviours shown by all children, repeated observations and or frequent contacts with a child are necessary to judge if his[1] behaviours truly deserve special attention. In a classroom setting, teachers have the opportunity to observe children on a daily basis. They have a chance to watch them in comparison with other children of the same age and during a variety of activities.

[1] At various places in this thesis, the child has been referred to as 'he'. I do not wish this to be interpreted as gender bias.

This provides them with a strong reference point for making judgements about the behavioural functioning of the children in their classes. Their training and experience further add to their skill in observing children, making them a particularly appropriate source for information about the behaviour of the children in their classes.

The aim of involving teachers in identifying emotional and behavioural problems shown by children is well matched with the roles and responsibilities of schools and with the world wide concern toward the integration of special needs pupils (including children with physical, learning and behavioural problems) into ordinary classrooms. The Warnock Report (DES, 1978) which was influential in Britain in integrating children with special needs into the ordinary classroom, specified:

> " a teacher of a mixed ability class of thirty children even in an ordinary school should be aware that possibly as many as six of them may require some form of special educational provision at some time during their school life and about four or five of them may require special educational provision at any given time" (p. 41).

The Warnock Committee emphasised the obligation on the part of the teachers to perceive and initiate help for children with special needs:

> "the large majority of children who are likely to require special educational provision... will have to be identified. Close and continuous observation of all children by their teachers is therefore essential and for this to be effective teachers must be equipped to notice signs of special need. Moreover, having noticed such signs in a child they must appreciate the importance of early assessment of his needs and must know when and where to refer for special help" (p. 227).

Following the Warnock Report, Croll and Moses (1985) highlighted the teachers' role in assessment of special needs. They stated,

> "The notion of special needs contained in the Warnock Report rests on an educational judgement about the sort of provision which particular children require and the extent to which the 'specialness' of the provision made for a particular child goes beyond the variation in approach which will occur between any two children. These are judgements which will be made for the most part by ordinary teachers in ordinary classrooms. Whether children are subsequently referred for special help outside the school, receive additional help in the school or stay in the classroom for their needs to be met by the regular teacher, class teachers will be responsible for making the initial assessment" (p. 4).

Peers within the classroom situation are another useful source of information on children's emotional and behavioural problems. However, the findings from some developmental studies seem to caution against young children's judgements of emotional and behavioural problems. For example, Coie and Pennington (1976) found in their study of 7, 10, 13 and 17 year old children that only 17 year olds were able to recognise socially withdrawn behaviour (projected through stories) as an important deviation in social behaviour. The younger children tended largely to mention aggressive behaviours as socially undesirable, a tendency which reduced at age 17. A similar argument was made by Younger, Schwartzman and Ledingham (1985) from their developmental work on children's conceptions regarding socially undesirable behaviours. In a recent study, Olson and Brodfeld (1991) found that teachers and peers (4-5 years old) did not agree on their selections of socially rejected children, but had good agreement concerning the identification of children with externalising-type behaviour problems, though Moller and Rubin (1988) found their teacher ratings of the children's withdrawn behaviour to be significantly related with their peers' ratings.

Since the teachers have the advantage (over peers) of not being a part of the peer group, their ratings are likely to be less reactive and more objective than the peers' ratings (Moller and Rubin, 1988). Additionally, practical problems of seeking parental permission for all children in the class to be involved in such evaluations of behaviour restricts the possibility of involving 'peers' on a regular basis.

1.2.1 Arguments against using teacher-based assessments of emotional and behavioural problems

Identifying children's emotional and behavioural problems invariably involves some degree of human judgement. Each teacher may have her[2] own concept of which behaviours are acceptable or bothersome. Her personal characteristics such as level of tolerance, physical fitness and socio-cultural background might influence her decisions concerning which behaviours she may or may not consider as problematic. Factors such as job training, experience, job satisfaction and other school related factors may further influence teachers' assessments of children's emotional and behavioural problems. Discussing the factors that might influence teachers' assessments of children, Croll and Moses (1985) write,

> "... most assessments of pupils as having special needs inevitably involve some element of comparison with other pupils. The comparisons that are made, however, and that may be tacit rather than explicit in the teacher's mind, may vary considerably. A pupil may be compared with other pupils in the same class, with other pupils of whom the teacher has had experience or with national test norms. Consequently, a child considered as having a ... difficulty in a particular class taught by a particular teacher may not be so considered by a different teacher or in a different class taught by the same teacher" (p.17).

[2] The teacher is referred to as 'she' as most primary school teachers are women.

However, arguments concerning 'bias' in assessments of children's emotional and behavioural problems may be applicable equally to parents or other informants. As Achenbach and Edelbrock (1983*a*) put it,

> "Observations of problem behaviour can never be totally unbiased. Even trained observers who follow rigidly prescribed procedures, for example, are constrained by the setting in which the child is seen and the observers' impact on the child. Because all observations are susceptible to biases of one kind or another, the question is not how to obtain totally unbiased data, but how to obtain the most useful data despite possible biases" (p.1).

Since the decision regarding what will be done for the children who show problems in a classroom setting rests largely on the classteachers, they form a pivotal source of information about children's emotional and behavioural problems in the classroom setting. This is not to say that further specialised training for teachers to assess and deal with children's problems in the classroom setting won't be necessary. In fact, there is evidence that this is one aspect of their work in which teachers do not find themselves well equipped by their training. For example, in a survey of primary teachers, Bassey (1981) found that 60% of the teachers thought that their training had been inadequate in helping them to deal with 'classroom control and discipline' and only 31% thought that it had been good. Croll and Moses (1985) found 80% of their 428 teachers to state that they had received no special training in the area of special educational needs. Brooks (1983) reported that when teachers were given a checklist relating to children's skills, they initially thought that it would be simple for them to complete it for certain children in their classes but later stated that they did not know children's strengths and weaknesses as well as they had thought and that they had had to devise procedures for learning about them.

Another source of concern in engaging teachers for identifying emotional and behavioural problems is the amount of time involved in assessing emotional and behavioural problems. From their daily interaction with children, teachers are likely to have some idea about children's problems but an attempt to assess them in a systematic and standardised way may be very demanding on the teachers' time. The use of brief, quick and easy to complete as well as reliable and valid measures may go some way in dealing with this source of concern. However, if teachers from their daily observations are likely to know which children show what problems, it seems important to reflect on the necessity of standardised assessment. The following section deals with this issue.

1.3 The Importance of obtaining standardised teacher-based assessments of children's emotional and behavioural problems

Standardised assessment of emotional and behavioural problems broadly refers to obtaining reliable and uniform descriptions of children's behaviour. If each teacher describes a child's problems in her own way, it may be difficult to compare others' view point of the same child's behaviour. It may also be difficult to ascertain how the child compares with other children in the class who show similar, different or no problems; or with children of the same age, gender and similar socio-cultural background in another classroom. Furthermore, assessing the degree of improvement or deterioration in a child's behaviour may require comparison of information at different points in time. If haphazard information is obtained on children's behaviour, such comparisons may be complex and arduous. By focusing on a common set of variables, standardised assessments facilitate inter and intra-indivdual comparisons, which are important for effective assessment, intervention and the progress of knowledge regarding emotional

and behavioural and behavioural problems (Achenbach & McConaughy, 1987). As Achenbach (1985) puts it, "To advance our knowledge of causes and cures,... we need a clear picture of the problems whose cures and causes are sought. To obtain such a picture, we need, better assessment of individual cases and better taxonomic procedures for identifying the key similarities and differences between cases" (p. 9). He further emphasises the need to obtain standardised assessments by writing,

> "Unstandardised assessment is vulnerable to a variety of information processing biases. If we obtain different types of data from one case to another, for example, we cannot determine what features best distinguish a particular child from others. We would also be unable to detect the most important similarities between a child and other children with whom experience has previously been gained. Furthermore, if we each use different assessment procedures, we may obtain very different pictures of the same problem" (Achenbach & McConaughy, 1987, p.15).

The use of standardised assessment procedures may also provide a common language for teachers to facilitate communication about children's problems with other teachers in the school, headteachers or outside professionals such as psychologists, social workers and clinicians. In principle, standardised assessments should help local authorities in the allocation of resources to children, classes and schools most in need of them. In time, the use of such procedures should also result in standard, context specific, norms of children's emotional and behavioural development and may have a role in teacher training and the training of other professionals involved in dealing with children. The use of standardised assessments is particularly relevant in research for selecting samples, and in making generalisations from research findings within and across cultures. Such assessments also have an important role in linking research with educational and clinical practice.

The use of standardised assessment, however, has been criticised on the grounds that it ignores the individuality and contextual specificity of the child's behaviour, as well as for the 'trait' oriented assumptions that underlie the psychometric concepts such as reliability and validity of standardised assessment. For example, if one rejects the view that stable traits manifest themselves in similar ways over time, then viewing variability of scores over time as reflecting an unreliable measuring instrument rather than inherent behavioural inconsistency would be inappropriate. Similarly, concurrent validity has little meaning if one accepts cross-situational variability as the norm, because a lack of situational consistency reflects things as they are, rather than an invalid measurement procedure (Kazdin, 1979).

Several writers have discussed these concerns and have noted ways in which psychometric considerations might be applied to assessment of children's behaviour (Mash & Terdal, 1988; Achenbach, 1985; Mash, 1985). In spite of the ongoing debate, however, there has been little resolution of these issues. Mash and Terdal (1988) have pointed out that, by and large, these arguments reflect fundamental differences in views regarding the utility of differing models of human functioning. The key issue, they add, centres around the compatibility or incompatibility of the idiographic and nomothetic approaches to assessment. While recognising the arguments on both sides of the issue, they concur with the view that these approaches are complementary and that both are necessary for understanding, assessment and treatment of emotional and behavioural problems in children. They quote Strosahl and Linehan (1986) in support of their argument, "By using nomothetic principles, the behavioural assessor starts with a framework within which the idiographic elements of the individual case can be developed and refined. Nomothetic principles deliver hypotheses that can be tested idiographically. Conversely, idiographic data can sometimes point the way for

nomothetic research, which in turn can be used to guide further idiographic testing" (p.36).

Within the classroom context as well, both approaches may have a place. Whereas nothing might match the sensitive observation of individual children by a regular classroom teacher, the use of context specific, standardised procedures to record these observations may be more useful than haphazard methods. "Standardised descriptions are not a panacea, but they can at least help practitioners and researchers of different persuasions focus on a common set of phenomena" (Achenbach and Edelbrock, 1983*a*, p. 1).

1.4 Methods for obtaining standardised assessments of children's emotional and behavioural problems from teachers

Currently three methods- direct observations, clinical interviews and rating scales- are popularly used for assessing children's emotional and behavioural problems. Each method has its own set of merits and demerits. Observation provides a direct method of recording behaviour as it occurs. It is the most accurate of the three methods for collecting information on children's behaviour and situational variables. In particular, structured observation schedules contain preset and finite categories aimed at reducing the use of memory. High reliability has been found in studies where observers simultaneously record the same behaviours. Although observations may be carried out in analog or role-play situations, observations made in the natural settings (e.g., home, school) provide the most useful information concerning children's emotional and behavioural problems. However, specialised training is usually necessary for recording behaviours in a reliable and prescribed manner. Repeated observations are often necessary before making decisions concerning specific

problems shown by children and the associated situational variables of the problems. All this makes observation an expensive and time consuming method. Given the constraints on teachers' time, the scope for use of structured observation procedures by classteachers themselves is limited. Observations by outsiders in the classroom settings may be obtrusive and are expensive, so that their use is typically carried out for the validation of teachers' assessments.

The clinical interview is presently the most widely used assessment procedure in the clinical area. When the child is referred for problems by parents, teachers or others, clinical interviews with parents, other concerned adults and the children themselves are typically used for obtaining descriptions of complaints, the course of the problems, the developmental history and the family background. Besides information on the child and other variables, these interviews provide an opportunity to the clinician to get acquainted with the child and the family, to make practical arrangements for further assessment and to form clinical hypotheses. Although information obtained from clinical interviews has a high degree of face validity, it does not lend itself easily to standardisation and psychometric evaluation. Low inter-interviewer agreements have been found in diagnosis made from clinical interviews (see Cantwell, 1988). This type of method obviously seems unsuitable for use with teachers in an educational setting. More recently, to cope with the weaknesses of clinical interviews, structured interview schedules have been designed. However, Edelbrock and Costello (1988) from a review of existing interview schedules concluded that behaviour rating scales were a much more economical method for obtaining the same information than structured interviews.

Rating scales are designed to obtain judgements of children's functioning from those who see them in different situations such as parents, teachers, peers or from the

children themselves in a standardised way. Their aim is usually to obtain the rater's judgement of the child's behaviour rather than a count of specific behavioural events (Achenbach, 1988). Most rating scales yield quantitative indices by getting the raters to quantify their view. Generally, no specialised training is necessary for the raters to complete the scales, though meanings of terms used in the scales may sometimes need clarifying for the sake of uniformity of interpretation by different raters. Rating scales may include a diverse set of behaviours and may help in providing information over a variety of time periods and behaviours that are difficult to observe. Because they reveal quantitative information on children's behaviour they lend themselves easily to statistical analyses. Many rating scales have been designed for assessing emotional and behavioural problems and have been found to show high test-retest reliability, internal consistency and various types of validity. Using these scales, it is possible to examine inter-rater agreements on children's behaviour and to evaluate changes in behaviour at different points in time. Since they are easy to complete, norms can be obtained from representative samples. The completion time for these scales is likely to vary according to their length but most existing ones may be completed in 5-15 minutes (see Barkley, 1988 and Boyles & Jones, 1985 for reviews). By and large, rating scales are considered to be the most economical way of collecting information on children' behaviour. Their cost-effectiveness and easy completion particularly make them a potential method for use with teachers, especially where teachers might have to provide information on groups of children.

In spite of their advantages, rating scales, are necessarily an inexact measure for identifying emotional and behavioural problems in children. The information obtained from their use may be affected by idiosyncratic biases of the raters, rating biases or halo effects (Barkley, 1988). Since they are usually brief, they may not provide a

comprehensive view of the children's difficulties. Unlike observations, they describe what the child's behaviour is from the informant's point of view and not what it may actually be.

Under such circumstances, a widely used strategy of employing a two stage identification procedure- brief screening leading on to a more exhaustive/diagnostic assessment- may be useful. The use of rating scales by teachers at the first, screening stage, may then be followed by more accurate measures such as repeated observations by trained observers, and information from multiple sources at the second, diagnostic, stage. Seen from this rather pragmatic perspective, rating scales seem to have a role in an educational setting. In fact, they may act as an aid to regular classroom observations by teachers. They may also help teachers to cut down on the time needed for keeping observational records of children's behaviour and provide the other advantages of standardised assessments discussed in the previous section.

Potton (1983) reported that 70% of the teachers in his survey found rating scales as a more or less helpful method in sharpening their observations and record keeping. The following are some comments made by headteachers on the use of rating scales in schools from Potton's study,

> "I consider that we use it (a checklist) to alert the teacher to the areas of weakness and possible progress made by the child. That is not to say that I think teachers were previously unaware, but that certain aspects are more clearly pinpointed after considerable thought and inter-staff discussion".

> "For us, the checklist's greatest value lies in the need for close observation of individual children and the resulting discussion between the class teacher, head of the Infant Dept., and headteacher. Different viewpoints have sometimes led the class teacher to take a second look at a child, and come to a different, perhaps a more objective view, particularly in cases of specific weakness" (Potton, 1983, p. 50).

Although screening as a strategy for early identification of school related problems has become popular in the last two decades, it has also attracted a certain amount of concern for issues related to misclassification of children, poor predictive outcomes and pejorative labelling. It will therefore be useful to examine these issues briefly.

1.5 Screening Vs. Diagnostic assessment

To screen literally means "to sift coarsely" (Macdonald, 1972, p. 1216). The word is used metaphorically in medicine and education. It implies "application to all children... procedures which can be carried out in a short time by the less specialised members of the staff and which will give indication of the presence or absence of a certain disability (or a problem)... If results are positive, indicating *actual or probable* presence of the disability (or a problem), the child is referred for specialist investigation" (Drillien and Drummond, 1983, p.1, emphasis and parentheses added). The aim of the second stage is the detailed appraisal of an individual child on specific dimensions to pin- point specific weaknesses (Berk, 1984), which can then be the target of intervention.

The concept of screening vs. diagnostic assessment for early identification of children's problems has been very successful in some areas, for example, in medicine for Phenylketonuria (PKU). In education, however, screening has been open to debate. The main source of concern has been the use of instruments which lack evidence for their effectiveness resulting in misclassification of children (Leach, 1983; Lindsay & Wedell, 1982). It is obvious that this criticism pertains to the quality of instruments used for screening rather than the process of screening itself. Lindsay and Wedell (1982) who are among the critics, for example, themselves recognise the need to use

"well produced instruments" for "classroom- based screening... to help focus the teacher's attention" on the difficulties experienced by children (p. 216).

A second source of concern has been regarding the 'predictive model of evaluation' used to assess the efficiency of screening instruments in education. In the absence of adequate research strategies, the usual procedure followed to determine the efficiency of screening instruments has been to examine the extent to which they predict the later success or failure of the children on similar tasks. Consequently, there are some children who show problems initially on the screening measures, but not in the follow-up, and there are others who do not show the problems in the initial screening, but do so in the later evaluation. Both these groups contribute to the poor predictive validity of the screening measures. There may also be several other reasons for poor predictive validity apart from the inefficiency of the instrument in question. For example, good or bad teaching, good or poor health of the child, family problems, technical inadequacies of the instruments used (Gipps, Gross & Golstein, 1987). However, the main criticism has revolved around the basic assumptions of the 'predictive model' itself (Lindsay and Wedell, 1982; Gipps et al., 1987). Lindsay and Wedell's (1982) argument is that the predictive model assumes the "stability" of children's competence and they therefore resist its use. They resolve the issue by viewing the main purpose of screening as "here and now" and not for predicting later outcomes. They propose that screening should lead to planning of interventions in the form of framing teaching objectives and monitoring the child's progress without attempting to match it with initial test performance.

Lindsay and Wedell's (1982) concern is about the effects of screening in terms of pejorative labelling of children. There is a danger that identifying a child as showing

special problems may produce more harm than help. This concern however, needs evaluation in terms of a balance between benefits resulting to the child from correct identification against the stigma of a label. Keogh and Becker (1973) write, "Concern for development of a given child may result in intervention strategies of benefit; however concern may also lead to overemphasis upon certain abilities or inabilities and result in anxiety which generalises to affective and motivational aspects of development" (p.8). They suggest making efforts to offer effective interventions as a solution, rather than giving up the idea of screening for early identification of educational and psychological problems.

Above all, however, the aim of predicting later outcomes from screening instruments, or of hoping to intervene after screening or labelling that the child has a problem after the screening process reflect misconceptualisation of the basic concept of screening. As defined earlier in this section, the main aim of screening is to indicate "actual or probable presence of disability" .. and to "refer the child for specialist investigation " (Drillen & Drummond, 1983, p.1). Therefore, if screening is viewed as an initial step to a more thorough assessment of problems later on, the issues related to labelling, intervening or predicting later outcomes do not really follow from this stage. Rather, if viewed in its true spirit, it may provide teachers with a quick and cost- effective strategy for identifying possible problems in a systematic way. It may also draw their attention to all children in the class, including those who otherwise may not be conspicuous.

Given that a two step procedure is likely to be useful in assessing children's emotional and behavioural problems, standardised behaviour rating scales, seem to have the potential for use with teachers for identifying emotional and behavioural

problems at the first, screening, stage. Considering, however, that such scales are an inexact method for identifying emotional and behavioural problems (Fombonne, 1989; Barkley, 1988), it is important to examine the accuracy of the measures obtained from the teachers' standardised reports. The next section examines the empirical evidence on this issue.

1.6 Accuracy of teacher-based rating scales in identifying emotional and behavioural problems.

As argued in the previous section, teachers provide a practical and potentially appropriate means for identifying emotional and behavioural problems shown by young children in the classroom setting. It is, therefore, crucial to examine the available evidence regarding the accuracy of the measures resulting from teacher-based rating scales. Like other instruments designed to assess psychological variables, the accuracy of the measures derived from teacher-based scales for identifying emotional and behavioural problems in children must largely be viewed in terms of their reliability and validity.

1.6.1 Reliability

Several studies in the past have shown that teachers are reliable reporters of children's emotional and behavioural problems. Croll and Moses (1985) in their study found that teachers were consistently able to distinguish between different behaviour problems shown by their pupils. Many studies using rating scales have shown test-retest reliability over one week to two weeks of teachers' reports to range between 0.8 to 0.9 (Achenbach & Edelbrock, 1986; Behar & Stringfield, 1974; Miller, 1981), while between two to four months stability of teachers' reports ranges from 0.74 to 0.68

(Achenbach & Edelbrock, 1986). Rubin and Clark (1983) found teachers to be more reliable reporters than children's peers. Hymel, Rubin, Rowden and LeMare (1990) found teacher ratings of internalising behaviour in children to be significantly related to shy-anxious behaviour over a period of three years and their ratings of externalising problems to be significantly related to acting out behaviour over the same period. Tremblay, LeBlanc and Schwartzman (1988) found teacher rated problems of children to predict antisocial behaviour over a period of seven years.

Agreement of teachers' reports with other informants (although technically about validity), has been found to be low to moderate depending upon the type of informants. Achenbach et al. (1987) calculated mean correlations between informants regarding the ratings of emotional and behavioural problems shown by 4-17 year old children in 269 published studies (Achenbach et al., 1987*a*). The typical level of agreement between pairs of teachers was 0.64 (see Table 1). Although this level of correlation shows a substantial level of agreement, it is far from perfect. The correlations of teachers' reports with parents', mental health workers' and observers' reports were even lower, ranging between 0.24 to 0.44. However, such low levels of agreements probably do not reflect poor reliability of the teachers' reports so much as the cross-situational variability in children's behaviour and the different expectations of different informants. Children selected as problem cases by teachers may not show problems in all situations. The behaviours considered inappropriate by teachers in the classroom setting may not be a cause for concern to parents or those dealing with the children in situations other than a classroom. However, the available evidence does indicate substantial reliability of teachers' standardised reports within the classroom context. This is not to say that there is no room for improvement and additional training may be helpful for some purposes, but it seems fair to conclude that, for research purposes and providing precautions are taken to minimise the

Table 1

Mean Correlation Between Informants From Achenbach, McConaughy & Howell (1987)

		Informant 2				
Informant 1	Parent	Teacher	M Wor	Obs.	Peer	Self
Parent	.59					
Teacher	.27	.64				
M. Worker	.24	.34	.54			
Observer	.27	.42	-	.57		
Peer	-	.44[a]	-	-	.73[a]	
Self	.25	.20	.27	-	.26[a]	.74[b]

a. Peers' correlation in all studies were based on aggregation of ratings by multiple peers.

b. Test-retest correlations for self-ratings.

M. Worker = Mental Health Worker

obvious sources of bias, teachers' ratings provide a reliable means for selecting children who behave atypically in the classroom context.

1.6.2 Validity

The second issue needing consideration is the validity of the teachers' reports obtained via rating scales. The issue of validity of a measure is essentially linked with the definition of the phenomenon that it is designed to measure. As with many other variables that psychologists study, for example, temperament, there is currently no universally agreed definition of emotional and behavioural problems (Haring, 1987; Bower, 1982; Eaves, 1982). In the past, a variety of conceptual models have been put forward to explain the development of emotional and behavioural problems in children, including the medical, psychoanalytic, cognitive, behavioural, and family systems models (Maier, 1969; Achenbach, 1982; Coleman , 1986). However, the specific formation, stability or transience of these problems is poorly understood and it has been difficult to explain all the problems by using any single model (Boyles and Jones, 1985). As Kazdin (1989) contends,

> "It is unreasonable to expect sweeping theories derived from a single conceptual model (e.g., psychodynamic or behavioural) to explain the development of "psychopathology" or even a particular disorder. Broad theories can provide coherent accounts or explanations of the problem, but they rarely generate readily testable hypotheses" (p. 185).

The lack of consensus on etiology of emotional and behavioural problems is also evident from an array of terms- emotional and behavioural disorders, deviance, disabilities, maladjustment, maladaptation- used interchangeably to refer to the same phenomenon (Coleman, 1986). Along with lack of known etiologies, several other reasons including the nature of the problems (largely dependent on social norms), the

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methods used for assessing the problems (involving human judgement) and developmental considerations are probably responsible for the lack of agreement on the definitional issue. As Quay (1986) has put it,

> "Scientific understanding is, in large measure, the ability to describe precisely the functional relations between entities or events. The ability to set apart such entities or events from one another and to describe their properties in terms of observable phenomena is a precursor to understanding the relations between them. In abnormal psychology, the entities (disorders) that need to be understood ... have not been easy to describe. The complexity and dynamic nature (especially in children) of human behaviour and the crude state of our observational techniques have all contributed to the difficulty of describing (and measuring) those disorders that must form the essential elements of a science of childhood psychopathology" (p. 1).

In the broadest sense, the problems are considered to stem from a combination of maturation and learning, within the context of the child's immediate environment (Boyles & Jones, 1985). Much has been written about the etiology and course of these disorders but more tightly focused understanding awaits further longitudinal research (Offord & Waters, 1983).

By and large, the medical approach has so far dominated the scene of assessment of children's emotional and behavioural problems. Within this model the problems are classified conceptually into several distinct categories and subcategories. (See, for example, the Diagnostic and Statistical Manual-III (DSM-III), American Psychiatric Association, 1980; 1987). Each category is then defined as a specific disease entity. Although this classification system has undergone several revisions since its inception, the reliability and existence of all the categories in the system have frequently been questioned (Quay, 1986; Achenbach, 1985; 1980). Freeman (1971) reported 59% agreement and Rutter et al. (1975*b*) reported 67% agreement among child psychiatrists regarding clinical diagnoses of various disorders. More recently, Cantwell

(1988) reported similarly low agreements among clinicians following recent revisions of the DSM diagnostic scheme.

As a result of this dissatisfaction with the clinical- nosological way of looking at emotional and behavioural problems, more recently the need to explore the empirical nature of the problems has been emphasised (Achenbach & McConaughy, 1987; Reid, Patterson, Baldwin & Dishion, 1988). The empirical approach does not choose between theoretical explanations about why the maladaptive behaviour occurs. Instead, it relies upon psychometric principles for methodological guidance. Using reliable and valid instruments, the empirical nature of the problems is explored. As Achenbach and McConaughy (1987) have put it, "If assessment validly captures the distinctive features of individual cases, this can improve our basis for developing and testing theory" (p.13). However, the lack of theoretical basis at the outset raises issues regarding the validity of the instruments used for measuring the problems. Although a matter of some concern, this limitation is no longer insuperable. Many studies of different populations using different instruments to date have provided validational evidence for the empirically derived structure of emotional and behavioural problems.

Cronbach and Meehl (1955) have pointed out that validity is usually based on relative criteria rather than absolute standards. The evidence derived from empirical measures such as rating scales give rise to two main types of validity : criterion and construct. *Criterion* validity assesses the extent to which a measure reproduces an independent (gold standard) assessment of the same attribute. For example, if a rating scale is to serve as the basis for classifying individuals into a set of predefined categories- as having or not having problems, then an independent criterion or basis for classification must be available. The independent criterion may serve to identify the threshold (cut-

off point) on a scale. The degree of sensitivity (the ability of a scale, to correctly identify those who are considered to have a problem on an independent criterion) and specificity (the ability of the scale to identify correctly those who do not have a problem on an independent criterion measure), therefore gain utmost importance in decisions about the criterion validity of a scale. Unfortunately, at the present time there is no 'gold standard' to assess emotional and behavioural problems, although the observation of trained researchers may go some way towards meeting this need, particularly if they are supported by video recordings or other criterion-references.

Under practical circumstances, clinically relevant criteria are often used to designate the cut-off points on assessment scales. For example, the ability of a scale to discriminate between clinic-attending and non-attending populations is frequently used for this purpose. Although such a criterion is not perfect (for example, there may be children in clinics who should not be there, and children who are not in clinics but should be there), it has been found to show clinical utility, for instance, in predicting outcomes. However, what is not clear at the present time is the applicability of clinical standards to an educational setting. Do teachers agree with a clinically derived cut-off point? How accurate would the measures derived from clinically designed scales be within an educational setting? Some previous studies have suggested dissonance among mental health professionals' and teachers' views regarding which behaviours in children are a cause for concern. This seems likely considering the differences in the training of the two professional groups and the conditions under which they see children. Wickman (1928, cf. Vidoni, Fleming & Mintz, 1983) reported a correlation (Spearman rank order) of -0.11 between teachers' and mental health professionals' ranking of 50 behavioural items in order of the importance attached to them. Subsequent efforts to replicate Wickman's findings have shown higher but far from

perfect correlations (Stouffer, 1952; Rajpal, 1972). In the latest replication of Wickman's study using very similar procedures to the original study, Vidoni et al. (1983) found a correlation of 0.59 between teachers and mental health professionals in ranking the same 50 items. Vidoni et al. (1983) also found that the increase in correlations was mainly due to drift on the part of the mental health professionals. However, as they (Vidoni et al., 1983) recognised, some of their mental health professionals, unlike Wickman's, were ex-teachers, so that their previous status as teachers may have created an artifact in the findings. Besides these findings, the typical agreement between mental health workers and teachers in identifying children as showing problems reported by Achenbach et al. (1987*a*) and discussed earlier are of the same order (see Table 1).

These findings suggest that it can not be assumed that measures with a clinical background will be directly relevant for educational settings. Consistent with this view, Luk et al. (1991) have argued that it is "unwise to ignore" (p. 216) what teachers think about a child even if it disagrees with the clinicians' views. This seems reasonable, considering the central role of teachers in classroom settings in identifying and helping children who show emotional and behavioural problems.

The second issue relates to the *construct* validity of the measures derived from teachers' reports on rating scales. Construct validity is perhaps the most elusive form of validity. It concerns the assessment of hypothesised variables for which there is no definitive criterion measure. If we knew what variables to hypothesise and if we had definitive criterion measures, there would be little need for instruments, such as rating scales to assess problems. As a way of dealing with this issue more pragmatically, statistical procedures, such as factor analysis, are applied to ratings of several specific

behavioural items, to categorise problems. In order to validate the resulting constructs, the absence of definitive criteria has generally led to "bootstrapping" of one sort or another; that is, attempts are made to lift measures "by their own bootstraps" by establishing relationships among measures all of which are known to be imperfect (Achenbach and Edelbrock, 1978). Although bootstrapping seldom yields very satisfying results, it is probably an inescapable stage in the quest to find and establish the empirical nature of the constructs. It is also encouraging to note that despite the imperfections and limitations involved in the procedures, the agreements between the empirically derived measures and behaviour problems across different populations and instruments has been encouraging. Achenbach and Edelbrock (1983*b*; 1978) and Quay (1979) in reviews of the literature concluded that factors identified by studies using multivariate analyses could be subsumed by two broad- band groupings showing a distinction between internalising and externalising problems. The broad-band grouping proposed by Achenbach and Edelbrock (1978) and Quay (1979) has subsequently been replicated in many studies using similar analyses.

Evidence for the construct validity of teacher-based scales may be accrued from studies which have assessed relationships between categories of problems found, using different instruments on the same population (convergent validity). For example, in a study of 104 behaviourally disordered children attending special schools, Edelbrock, Greenbaum & Conover (1985) computed Pearson's correlations between the teachers' reports of these children obtained with the use of Conners' Revised Rating Scale (Goyette, Conners & Ulrich, 1978) and the Teacher Report Form (TRF) developed by themselves. They found a correlation of 0.85 between the two scales. The similar subscales derived from the factor analyses of each of the scales were also compared. A subscale summarised as 'inattentive- passive' on the Conners' scale was

found to show a correlation of 0.76 with the 'inattentive' subscale from the TRF. Another subscale called 'conduct disorders' on the Conners' scale showed a correlation of 0.90 with the subscale termed as 'aggressive' on the TRF. In the process of developing the Preschool Behaviour Checklist (PBCL) McGuire and Richman (1986) found high convergence with the measures derived from the Preschool Behaviour Questionnaire designed by Behar and Stringfield (1974) for the same purpose. Behar (1977), too, showed a high degree of agreement between the Preschool Behaviour Questionnaire and the Child Behaviour Questionnaire designed to measure the same problems in older children (Rutter, 1967). Thus, the evidence arising from statistical procedures such as factor analysis and from convergence among different instruments designed to measure emotional and behavioural problems can be used to support the validity of the empirical measures derived from teacher-based rating scales.

Another way to examine the validity of teachers' standardised reports may be to consider whether children identified as having problems by teachers' reports are found to differ on other variables. Previous studies have shown that the children selected by teachers as having problems show significant atypicalities on other variables, such as family background, parental psychopathology, peer relations and self- esteem (Rutter, 1985; Cohn, 1990; and Lochman & Lampron, 1986). Children referred by teachers to mental health facilities have been found to score higher on conduct problems, inattentive and passive behaviour (Luk & Leung, 1989).

The findings reviewed provide evidence to expect teacher-based rating scales to elicit reasonably accurate information on children's emotional and behavioural problems. However, the question of accuracy of an assessment implies a further question: accuracy for what purpose? So far as the aim is to generate definitive/diagnostic

measurement of individual children, information derived from teacher-based rating scales may be insufficiently accurate, and multiple methods and sources of data including observational evidence may be necessary. For other purposes, this degree of accuracy may be desirable but not essential. The question arises: what level of accuracy is needed for the purposes of the research included in this thesis.

The aim of the present study was to identify a group of children showing emotional and behavioural problems, together with a comparison group, so that the two groups could be compared on measures of social cognitions. An important consideration was that the present research required assessments which were accurate at the group, rather than individual child, level. Hence, measures derived from the teacher-based rating scales were considered to be, if not ideal, at least sufficiently accurate and economical. Following conventions in this area, described previously, methods such as factor and convergence analysis were used to substantiate the reliability and validity of the resulting assessments.

1.7 Obtaining standardised teachers' assessments in the first year of primary schools

The earlier sections in this chapter have argued that the first year of primary school is an appropriate context for identifying and helping children who demonstrate emotional and behavioural problems and that teacher-based rating scales provide a practical and useful means for identifying groups of children with emotional and behavioural problems both generally and for the present purpose. Currently, however, no standardised teacher-based behaviour rating scale is available for screening children for emotional and behavioural problems in the first year of primary schools. Of the two most widely used teacher-based assessments at the present time, the

Teacher Report Form (Achenbach & Edelbrock, 1986) is a long, 120 item scale which is more appropriate at the second, diagnostic, rather than screening stage. The other, the Child Behaviour Questionnaire (Rutter, 1967) is a brief instrument and has been used successfully for screening for emotional and behavioural problems, but was developed with and designed for older children. Another recently published scale, the Preschool Behaviour Checklist (McGuire & Richman, 1988) is a short 22 item scale, is attractively laid out and seems to be ideal for screening purposes but is designed for use in the preschool setting. It is not known if either of these two scales- the Child Behaviour Questionnaire and the Preschool Behaviour Checklist- would be useful for identifying the problems shown by children in the first year of school or if their reliability and validity would hold true in the first year of school. Neither of the scales has been used in India, from where the sample for the study on social cognitions was to be selected. It is not known if either of the two will be appropriate for the Indian classroom setting. Both these scales stem from a clinical background, so that it is not clear if the teachers would agree with the measures derived from these scales. Likewise, the cut-off points on these scales, meant to distinguish between children who demonstrate emotional and behavioural problems and those who do not demonstrate such problems, have been derived by using clinical criteriq. Using the teachers' views as the criterion measure, what would be the optimum cut-off points of these scales for identifying problems in the first year of school? Convincing answers to such questions can only really be provided empirically.

It was therefore decided to examine the suitability of these existing scales empirically. Since the scales were to be examined for use in the first year of school for the first time, two studies were designed. In the first study, the purpose was to compare the suitability of the Preschool Behaviour Checklist and the Child Behaviour Questionnaire

for use in the first year of primary schools in London (Britain), where both the scales were originally designed. The second study, was intended to evaluate one of the two scales, selected on the basis of findings from the first study, for use in India.

The next two chapters present the detailed objectives of the two studies, their methods, findings and discussions of the findings. The first year of primary school is known as the *reception class* in London (England). Study One, therefore refers to this context as the reception class.

CHAPTER TWO

STUDY ONE

Emotional And Behavioural Problems In Reception Class Children- A Study Of Convergence Between The CBQ, The PBCL And The TRF

2.1 Introduction

This study was designed to examine the suitability of the Child Behaviour Questionnaire (CBQ; Rutter, 1967) and the Preschool Behaviour Checklist (PBCL; McGuire & Richman, 1988) for screening emotional and behavioural problems in reception class schoolchildren. Since a choice had to be made between the two instruments, the Teacher Report Form (TRF; Achenbach & Edelbrock, 1986) was also included in the study as a yardstick for evaluating the PBCL and the CBQ. As discussed in Chapter One, the TRF itself is a long (113 items) scale and is more appropriate for a diagnostic rather than a screening role, but it is currently the best designed of the teacher based assessments of children's behavioural problems (Barkley, 1988). It is used internationally in research and is becoming increasingly popular in clinical and special education settings. It has been standardised on a large number of children from the first through tenth grade with attention to age and gender differences, and has good psychometric properties that suit it to the role of a standard for evaluating the other scales. Its companion instruments designed for use with parents, observers and children themselves contribute to its advantages. The children in the present study were expected to be slightly younger than the youngest age group (6 years) in the standardisation sample of the TRF but because of its international use and good psychometric properties, it was considered as a useful standard reference.

2.2 Overall aims of the study

One aim of the study was to compare the findings resulting from the use of the PBCL and the CBQ with those from the TRF in school reception classes. Both the CBQ and the PBCL stem from a clinical background, so another aim here, was to consider the agreement between the teachers' independent judgements about which children presented emotional and behavioural problems and the measures of children's behaviour obtained from the use of the two scales.

2.2.1 Criteria to examine the suitability of the CBQ and PBCL

Several criteria were set up to examine the relative suitability of the PBCL and the CBQ for use in the reception classes.

The first was to examine the factor structures emerging from their use in reception classes and to investigate the similarity of the factor structures with those found in the literature more generally.

The second criterion was to consider the scales' reliability and internal consistency when used in school reception classes.

The third was to assess their convergence with the measures resulting from the use of the TRF. That is, correspondence between the factors obtained from the scales, the agreement in their total scores, and the consistency with which the children were selected by the scales as having or not having problems, were assessed.

The fourth criterion was to assess the prevalence rates of emotional and behavioural problems resulting from the use of the PBCL, CBQ and TRF and to compare these rates with the rates reported by others for reception age children generally.

The fifth criterion was to examine the agreement between the measures obtained from the scales and the teachers' independent judgements about children's problems.

The last criterion was, to compare the performance of the CBQ and the PBCL at alternative cut-off scores.

It was hoped that the comparison of the scales on these criteria would enable one of the two scales to be chosen for further evaluation in India.

As described above, the aim in including the TRF in this study was not to assess it as a screening instrument, but to use it as a standard reference point for the CBQ and the PBCL. However, for theoretical interest, the findings resulting from its use in the reception classes were compared with those given by its authors from its use in the United States of America.

2.3 Location and time

The Study was conducted in the third term of 1988-89 in ordinary primary school reception classes in the Inner London Education Authority (ILEA), in two outer London boroughs - Bromley, Richmond - and two rural counties- Suffolk and Norfolk.

2.4 METHOD

2.4.1 Instruments

The instruments used in the study (the CBQ, the PBCL and the TRF) are included in Appendix 1 . A brief description of each and the information on their standardisation is given below.

2.4.1.1 The Child Behaviour Questionnaire (CBQ)

The Child Behaviour Questionnaire (Rutter, 1967) was designed for Junior School teachers to use in screening emotional and behavioural problems shown by 7-13 year old children. It consists of 26 items, covering two broad domains of behaviour -antisocial (externalising behaviours) and neurotic (internalising behaviours). The items are marked by the teacher on a three point rating scale- doesn't apply, applies somewhat and certainly applies. An example of the item format follows :

(Item 5)	Certainly Applies	Applies Somewhat	Doesn't Apply
Frequently Shy	----	----	----

The teacher is asked to choose one of the alternatives (see Appendix 1 for complete instructions). The items are scored as 2, 1 and 0. The higher score indicates higher frequency or severity of problems. A child may obtain a minimum score of '0' or a maximum score of 52 on this questionnaire. A total score of '9' or above is the recommended cut-off point to identify those showing problems that need further attention. A 'neurotic' subscore may be obtained by summing the scores on 4 items

-often worried, often appears miserable, tends to be fearful, and has had tears on arrival at school (S.No.s 7, 10, 17 and 23)- and an 'antisocial' subscore by adding the scores in 6 items- often destroys own or other's belongings, frequently fights with others, is often disobedient, often tells lies, has stolen things on one or more occasions, and bullies other children (S.No.s 4, 5, 15, 19, 20 and 26). The children who score 9 or above may be designated as neurotic or antisocial depending upon which of their two subscores is higher. Those with an equal neurotic and antisocial subscore may be considered undifferentiated.

The test- retest reliability of the CBQ was examined on eighty, 7 year old children. The Pearson's product-moment correlation between total scores at an interval of two months was reported to be 0.89. Inter-rater reliability was tested by getting four teachers to complete the ratings for 70 boys and girls in the last term of infant school and four other teachers to complete ratings for the same children after 2-3 months. A correlation of 0.72 was found between the two ratings (Rutter, 1967).

The cut-off point of the scale (a score of 9) was derived by comparing the CBQ scores of 86 children in the age range of 9-13 years from the general population with 34 children of the same age range attending clinics for emotional and behavioural problems. While 80% of the boys and 60% of the girls in the clinic sample scored 9 or above only 11% boys and 3.5% girls in the non-clinic sample scored 9 or above. The relationship between scores on the CBQ and ratings based on standardised psychiatric interviews with 9 to 11 year olds in the general population was also determined. Of the 157 children scoring 9 or more, 20% were rated as having a 'definite problem' by psychiatrists and 48% were rated as having a 'possible problem'. Thirty two percent were rated as having 'no problem'. Of the 133 children scoring 8

or less on the CBQ, only 2.3% received the rating of 'definite problem'. Although this misclassification rate is high, the scale seemed to differentiate between children likely to show emotional and behavioural problems. The author recognised that the scale was a simple and crude measure which needed to be supplemented with more information for clinical purposes (Rutter, 1967). Since its development the scale has been used in many studies in Britain as well as in other countries (Rutter et al., 1970; Venables, Fletcher, Dalais, Mitchell, Schulsinger & Mednick, 1983; McGee et al., 1985).

2.4.1.2 The Preschool Behaviour Checklist (PBCL)

The Preschool Behaviour Checklist (McGuire and Richman, 1988) was designed to identify 2-5 year old children with emotional and behavioural problems. It is meant to help staff in group settings in planning interventions for children with emotional and behavioural problems and to enhance communication between staff and other professionals. It consists of 22 items covering four behaviour domains- conduct problems, emotional difficulties, problems of social relations and capacity to concentrate. It also includes items on speech, habits, wetting and soiling. Each item has three alternatives and is designed to explore the frequency or severity of the difficulty. An example of the item format follows :

(Item 9)

Speaks freely to staff ----

Some reluctance to speak to staff ----

Very reluctant to speak to staff ----

The teacher is asked to mark one of the behaviours (see Appendix 1 for complete instructions to the teacher). The alternatives are scored as 2, 1 and 0. The higher score signifies greater frequency or severity of problems. A score of 12 or above was found to distinguish between problem and non-problem cases. It was considered to be the cut-off point and a signal for further assessment and concern.

The content of the PBCL was derived from the Behaviour Screening Questionnaire (Richman & Graham, 1971) which was used with parents of 3-4 year olds in an epidemiological study (Richman et al., 1982) and by consulting other questionnaires for measuring problem behaviours. It was standardised on 187 children, ranging in age from 26 to 58 months (mean age = 48.5 months), attending nursery classes and day care centres (McGuire & Richman, 1986). Its reliability was found to be 0.83 using Spearman-Brown split-half (odd-even) formula and internal consistency using Cronbach's alpha was also 0.83. The correlations between each item and the total score ranged from 0.21 to 0.49. The criterion validity of the PBCL was established by comparing the scores on the scale with independent observations made by psychiatrists who classified children into 'no problem', 'possible problem' and 'definite problem' categories. The agreement rate was 80% but most of it was for children in the 'no problem' category. Only 38% agreement was found for those above the cut-off point. Test- retest agreement for those above the cut-off was 83%. A correlation of 0.89 was found between the Preschool Behaviour Questionnaire (PBQ; Behar & Stringfield, 1974) and PBCL total scores of 73 children in a day nursery. Nineteen percent (14) of these children were classified differently on the two scales. Of these, eight were identified on the PBCL as above the cut-off scores and six were identified by the PBQ.

The construct validity of the scale was examined using factor analysis. Principal components analysis with varimax rotations derived six factors with eigen value greater than one. The largest was a conduct/restlessness factor which was a combination of management problems, restlessness and poor concentration. The second was an 'emotional/miserable' factor including items such as, sensitive, attention seeking, whining, miserable, prone to tempers and fearful. Factor 3 - 'aggressive' - loaded highly on fighting, interfering in other's play and being destructive. Factor 4- 'immature/isolated' was less clear and factor 5- 'social withdrawal' included two items- withdrawal from peers and adults. The last factor was sphincter problems. One item- habits- did not load above 0.30 on any factor. (Details of factor structure are enclosed in Appendix 1). More information on the reliability and validity of the factors and PBCL as a whole is given in its handbook and another article (McGuire & Richman, 1988; 1986).

2.4.1.3 The Teacher Report Form (TRF)

The Teacher Report Form (Achenbach & Edelbrock, 1986) was designed to obtain the judgements of teachers or teacher- aides on their 6-16 year old pupils' school performance, adaptive functioning and behavioural problems. It has recently been extended for 5 to 18 year old children (Achenbach & Edelbrock, 1991). Only the behaviour problems section was used in the present study. It consists of 113 items statements of behaviour and two open-ended questions in which additional problems may be written by the teachers. The teachers respond by encircling one of the three alternatives for each statement- '0' to indicate that the item is 'Not True', '1' to say 'Somewhat True' or '2' for 'Always True' for the child. A child may obtain a score in the

range of 0 to 240. The lay out of the items is similar to that of the CBQ described above.

The TRF was standardised on 1700 children. To reflect age and gender differences in prevalence and patterning of behavioural problems, separate cut-off points are designated for boys and girls at different ages. Those relevant for the present study were 50 and above for boys and 39 and above for girls (designated for 6 -11 year olds). The cut-off points were derived by comparing the distribution of the TRF scores obtained by clinic- referred and non- referred children and were fixed at the 89th percentile of the total scores of the non- referred population (Achenbach & Edelbrock, 1986).

The TRF is a component of a large behaviour assessment battery developed to obtain parallel information from multiple informants, for instance, parents, trained observers and self- reports of behaviour. The scores obtained on TRF may be plotted on a standardised behaviour profile to examine the pattern of problems shown by the child. The profiles for individual children may be plotted manually or with the help of computer programs available from the authors.

The content of the TRF was adapted from the Child Behaviour Checklist- CBCL (Achenbach & Edelbrock, 1983), designed to obtain reports of children's behaviour from parents or parent surrogates. The items of the CBCL were derived from an earlier research study (Achenbach, 1966), from the clinical research literature and consultations with developmental psychologists, child psychiatrists and psychiatric social workers. Behaviours of the CBCL considered inappropriate in the school situation , for instance, nightmares, talks or walks in sleep, wets bed, disobedient at

home, etc. were deleted in the construction of the TRF. Additional behaviours considered more appropriate for teacher's judgements, for example, fails to finish tasks, difficulty following directions, disrupts class discipline, etc. were added. Thus, the items of the TRF are those that cause concern to parents, teachers and mental health workers. The criterion related validity of the scale was established by its capacity to distinguish satisfactorily between referred and non-referred children. The factorial validity was determined by carrying out factor analyses on the TRF data obtained from the teachers of the clinic going children. The analyses were performed separately for boys and girls at different ages. The details of the procedures are given in Achenbach and Edelbrock (1986), but briefly, eight factors were retained from the 14 factor varimax rotations on the basis of their interpretability and meaningfulness for each age and sex group. The items loading on each of the factors for boys and girls in 6 to 11 years age range, their eigen values and the percent of variance accounted for by each factor are given in Appendix 1.

The scale's convergent validity was determined by administering the TRF and the Conners' Revised Teacher Rating Scale (Goyette et al., 1978) to a group of 104 children attending special education classes. The correlations between the TRF's aggressive, inattentive and nervous/overactive subscales and corresponding subscales of Conners' rating scale were found to be 0.90, 0.76 and 0.62 respectively (Edelbrock et al., 1985).

The test- retest reliability was reported to be 0.90 over one week, 0.89 over two weeks and 0.74 over two months. The Pearson correlation between teachers and teacher- aides was 0.57. All items of the TRF except one correlated significantly with

its total score. More information on reliability and validity is given in the manual for the TRF (Achenbach & Edelbrock, 1986). Despite being recent, the scale is being increasingly used in research as well as clinical settings. It has been translated into several languages other than English. The factor subscales derived from the parents' version of the scale have shown convergence with the DSM- III (American Psychiatric Association, 1980) categories (Edelbrock & Costello, 1988; Achenbach & McConaughy, 1987) and the Public Law-142 criteria for the Seriously Emotionally Disturbed (PL-142 SED) in the United States (Tharinger, Laurent & Best, 1986). The factors have been replicated internationally (Achenbach et al., 1987*b*).

2.4.2 Design of the study

The aims of the study required reception classteachers to give their independent judgements regarding which children in their classes had emotional and behavioural problems and to complete CBQs, PBCLs and TRFs for the same children's behaviour. A three- step design was used to obtain all the measures from the teachers. In the first step they gave their own independent judgement/view of the children's problem status; in the second step, they completed one rating scale and in the third step, they completed a second, but different rating scale (the details are presented later). In order to ensure that teachers' judgements of the children's problem status were not affected in any way by completing any of the instruments, it was decided to ask them to give their judgements in the first step. To counter the possibility of practice effects to some extent, it was decided to ask the teachers to complete two scales- the TRF and one other, the CBQ or the PBCL, instead of all three, for the same children in their classes. Since the instruments were being evaluated for screening purposes, it would have been desirable to ask the teachers to complete the scales for all children in their classes. Because each teacher was completing two scales, having them to complete the

two scales for each child in the class might have lead to considerable respondent burden. Therefore, they were asked to complete both the assessments for ten children in their classes. In addition, at the time these data were collected, schools in London were getting prepared to launch the National Curriculum (HMSO, 1988) for the first time and the teachers were heavily occupied.

Making judgements about the children's behaviour required the teachers to know the children well, the study was therefore designed to be carried out in the third term of the academic year.

2.4.3 Procedure for contacting the teachers

The study required contact with reception class teachers. The areas of the study were selected in consultation with the School Relations Office at the Institute of Education, University Of London (England). The education authorities of the selected areas were approached for permission to contact schools in their respective areas. The ILEA allowed access to only five schools due to other pressures (other research projects going on in the boroughs at the time and the introduction of the National Curriculum-HMSO, 1988) but the other authorities granted permission without any reservations.

On receiving permission, five schools in the ILEA and 30 schools from each of the other areas, were contacted through letters within the first week of the start of the term. The names of the schools in the ILEA were provided by the School Relations Office and those in the other areas were taken from the Primary Education Directory (Primary Research, 1988). Two letters were sent to each school- one was for the headteachers and another was for the reception class teachers. The letters for the

headteachers described the aims of the study briefly and requested them to pass the other letter to their reception class teachers and to encourage them to participate in the study. The letters for the reception class teachers were explicit in conveying the objectives of the study and what they had to do if they chose to participate. Two incentives were offered to encourage the participation of the teachers. One was that they would receive feedback on individual children's behaviour and the second was that they would be sent a copy of the findings at the end of the study. The teachers were asked to reply at their earliest convenience. A reply form and a stamped envelope was sent to the teachers. The letters were followed up by telephone contacts to headteachers. The copies of the letters inviting teachers to participate in the study, the reply form and the feedback sent to teachers after they had completed the scales are given in Appendix 2.

From the 125 schools that were contacted, 102 reception class teachers from 98 (78.4%) schools, opted to participate in the study. Of these, 80 reception class teachers who were the first in replying were contacted again via mail to obtain assessments of their pupils' behaviour.

2.4.4 Procedure for obtaining the assessments and sample.

The assessments of children's behaviour from the teachers who participated in the study were obtained in three steps. Each step was carried out with an interval of two weeks in between. In the first step, the teachers were asked to identify 10 children from their class registers and to give their independent judgements about the children's behaviour on a three point global rating indicating if they definitely, possibly or never presented problems (see Appendix 2 for the format of obtaining these global ratings).

To ensure random selection and to counter the possibility that children were grouped on class registers (for instance, in terms of date of entry or gender), half the teachers were asked to provide assessments for the first five boys and girls and half for the last five boys and girls on their register. To counter the possibility that there were any children who had joined school in the middle of the sessions and were new to the teachers, the teachers were asked not to include any child they had not known for at least two months.

In the next two steps, they completed the rating scales being evaluated, for the same 10 children from their classes. All the teachers completed two scales- the TRF and one other, the CBQ or the PBCL. Two weeks after receiving the informal judgements from the teachers, they were sent the first set consisting of one scale for each child they were going to assess. On receiving these back, the next sets of the second rating scale were sent at an interval of one week. The order of sending the scales was systematically varied, with the result that a quarter of the teachers were sent the PBCL first, then the TRF; a quarter the TRF first, then the PBCL; a quarter the CBQ first, then the TRF and a quarter the TRF first, then the CBQ (see Table 2).

Table 2

Sets of CBQs, PBCLs and TRFs Sent To And Completed By Teachers.

Order[1]	Number sent	Both sets completed	Only first set completed
1 PBCL/ TRF	20	15	2 (PBCL)
2 TRF / PBCL	20	19	- - -
3 TRF / CBQ	20	10	4 (TRFs)
4 CBQ / TRF	20	07	4 (CBQ)

[1] Order-1 PBCL/TRF means a set of PBCLs (N=10) sent first and then a set of TRFs(N=10) to those teachers who returned the first set and so on.

To make the assessments as standardised as possible, letters giving clear instructions on how to complete them were sent with both sets (see Appendix 2) for letters of instructions. In the letters teachers were requested to familiarise themselves with contents of the scales and to observe children that they were going to assess for a week before filling in the assessments.

Of the 80 teachers who were asked to complete the assessments, 61 (76.2%) completed the first sets of scales and 51 (63.75% of the 80), the second. At least two reminders via mail followed by a telephone call, were sent to teachers who did not return the assessments. In all, 550 TRFs, 360 PBCLs and 210 CBQs were received. Out of these one set of PBCLs and TRFs had to be rejected due to confusion about the identity of the children and another 4 TRFs were found to be incomplete. Thus 536 TRFs, 350 PBCLs and 210 CBQs were subjected to analysis. These included 330 pairs of TRFs and PBCLs; and 170 pairs of TRFs and CBQs (see Table 3).

Table 3

Number of Children For Whom TRFs, PBCLs And CBQs Were Analysed

	PBCL	TRF	CBQ
Total	350	536	210
Pairs	330	170	
Single	20	36	40
Boys	174	275	114
Girls	176	261	96

The analyses regarding convergence between the scales were done only on pairs whereas all scales were used for other analyses. The mean age of the children who

were assessed was 5 years 6 months (S.D.= 4.7 months). The number of TRFs and the CBQs returned by teachers was considerably lower than the TRF/PBCL combination. When the CBQ was sent first and the TRF second, the length of the TRF may have been a possible reason for which the teachers did not complete the scale, but it is not clear why the same problem did not affect the PBCL/TRF combination.

2.4.5 Scoring and analyses

Following the authors' instruction, the CBQ, the PBCL and the TRF were scored on a three point scale- 0, 1 and 2. A high score indicated problems which were frequent or severe. The scores on items were totaled for each scale and the analyses were done using the Statistical Package for Social Sciences, version-X (SPSS Inc., 1988).

2.5 RESULTS

2.5.1 Preliminary findings

All teachers in the present study completed the TRF and one other scale. Preliminary analyses were done to study the effect of order of completing the scales in the data. The results of one way analyses of variance did not indicate any significant differences in assessments obtained in the first and second order (F= 3.5, df 1,208 when the CBQs were completed in the first and the second orders; F=2.8, df 1, 348 when the PBCLs were completed in the first or second orders; and F= 2.03, df 3, 532 when the TRFs were completed in the first and second orders in combination with the CBQ or the PBCL), so the data were therefore summed across orders in the subsequent analyses (The complete results of analyses on order effects are enclosed in the Appendix 3).

2.5.2 Distribution of scores and prevalence of emotional and behavioural problems

The distribution of scores on all scales were examined to assess their suitability for further analyses using parametric statistics. Table 4 shows the distribution of the scores, their means, standard deviations, skewness and range. With the maximum possible scores of 44, 52 and 240 on the PBCL, CBQ and TRF, the highest obtained scores by children in the present sample were 28, 32 and 156 respectively. The majority of the children were on the lower continuum of scores- 61% of children scored below six on PBCL, 49% below six on CBQ and an almost equal number 46.5% were below 11 on the TRF. As these figures indicate, the data from all three scales were positively skewed, raising the issue of the appropriate type of analysis for data of this kind. Parametric techniques (t and F tests) are robust enough to handle distributions which vary markedly from the normal (McNemar, 1969), but correlational analyses may be affected by this degree of skewness. However, previous attempts to transform similar data using logarithmic transformation in an effort to normalise scores have essentially yielded the same results as with the skewed distributions (for example, McGee, Williams, Bradshaw, Chapel, Robins & Silva, 1985). Therefore, although a matter of some concern, this degree of skewness was not considered to invalidate parametric analyses. Instead, the skewness was born in mind in interpreting the findings of the analyses.

The mean scores for each scale were, CBQ, 7.01 (S.D.=6.31), PBCL, 5.20 (S.D.=5.03) and TRF, 20.76 (S.D.=22.23). Boys had significantly higher mean scores than girls on all the three scales ($F=10.05$, $df=1,208$, $p < .01$ for the CBQ; $F= 7.87$, $df=1,348$, $p < .01$ for the PBCL; and $F=19.01$, $df=1,534$ $p < .001$ for the TRF).

Table 4
Distribution Of Scores On CBQ, PBCL And TRF.

Score	Total	Boys	Girls	F Value[1]
CBQ (N)	**210**	**114**	**96**	
0-5	49.0%	39.5%	60.4%	
6-11	30.5%	34.2%	26.0%	
12-17	12.4%	15.8%	8.3%	
18-23	6.2%	7.9%	4.2%	
24-32	1.9%	2.6%	1.0%	
Mean	7.01	8.25	5.54	10.05**
SD	6.31	6.60	5.63	(df=1,208)
SE	0.43	0.61	0.58	
Skew	1.30	1.18	1.50	
N above Cut-off (9)	71(33.8%)	48(42.0%)	23(24.0%)	
PBCL (N)	**350**	**174**	**176**	
0-5	61.71%	54.6%	68.75%	
6-11	24.00%	27.86	20.45%	
12-17	12.29%	14.36%	10.22%	
18-28	2.00%	2.89%	0.57%	
Mean	5.21	5.96	4.46	7.87**
SD	5.03	5.46	4.45	(df=1,348)
SE	0.27	0.41	0.34	
Skew	1.21	1.18	1.11	
N above Cut-off (12)	50(14.3%)	31(17.8%)	19(10.8%)	
TRF (N)	**536**	**275**	**261**	
0-5	27.61%	22.90%	32.57%	
6-11	18.84%	16.00%	21.84%	
12-17	12.13%	12.00%	12.26%	
18-23	8.40%	8.36%	8.43%	
24-29	7.46%	8.00%	6.89%	
30-35	4.29%	5.09%	3.45%	
36-41	4.66%	5.09%	4.21%	
42-47	3.92%	5.09%	2.68%	
48-61	6.35%	9.08%	3.45%	
62-95	5.60%	7.25%	3.82%	
96-156	0.75%	1.09%	0.38%	
Mean	20.77	24.78	16.54	19.01***
SD	22.23	24.79	18.28	(df=1,534)
SE	0.96	1.50	1.13	
Skew	1.80	1.66	1.74	
N above Cut-off (39 for girls; 50 for boys)	72(13.4%)	42(15.3%)	30(11.5%)	

1 Gender differences in PBCL mean scores.
** p <.01, *** p <.001.

Using the cut off points given by the authors as the criterion (9 and 12 for the CBQ and PBCL respectively; 39 and 50 for girls and boys on the TRF), the CBQ identified the highest number of the children as having emotional and behavioural problems (33.8%), followed by the PBCL (14.3%) and the TRF (13.4%).

2.5.3 Factor structures of CBQ, PBCL and TRF

Principal components analyses with varimax rotations were performed on the CBQ, PBCL and TRF separately. Using Kaiser's criterion of eigen value greater than unity, eight factors emerged from analyses of the CBQ and accounted for 68 percent of the variance. Six factors emerged from the analyses of the PBCL and accounted for 60 percent of the variance. In the TRF, however, twenty four items were endorsed for less than five percent of children and contributed little variance to the data. Following Achenbach and Edelbrock (1986), these items were dropped from the analyses. They are shown in Table 5. (Had there been items scored for more than 95% children, those would also have been dropped but this was not the case). After dropping the 24 items, eighteen factors emerged in the initial analyses of the TRF. Many of these factors were not readily interpretable. Following the authors, eight factors were requested in the subsequent analyses which accounted for 51% of the variance.

Following the traditions in the literature on emotional and behavioural problems (Achenbach & Edelbrock, 1983; 1981), items loading at 0.30 or above on the factors were grouped together as factor subscales. Names were given to each subscale to summarise the content of the items loading on them (generally on the basis of highly loading items). The main purpose of the names is to communicate the structure of emotional and behavioural problems resulting from the use of these scales in

Table 5

TRF Items Omitted From Its Factor Analysis

No.	Items
5	Behaves like opposite sex
9	Cannot get his mind off certain things
18	Deliberately harms self
20	Destroys own things
28[a]	Eats/drinks non-foods
40[a]	Hears things
51[a]	Dizzy
52	Feels too guilty
55	Overweight
56a	Aches or pain
56b	Headaches
56c	Nausea, feels sick
56d	Eye problems
56e[a]	Skin problems
56g[a]	Vomiting
59	Sleeps in class
66	Compulsions
68	Screams a lot
70[a]	Sees things not there
85	Strange ideas
91	Suicidal talk
96	Sexual occupation
101	Truancy
105[a]	Uses alcohol /drugs

[a] These items were also omitted in the original study by Achenbach and Edelbrock (1986).

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56d	Eye problems
56e[a]	Skin problems
56g[a]	Vomiting
59	Sleeps in class
66	Compulsions
68	Screams a lot
70[a]	Sees things not there
85	Strange ideas
91	Suicidal talk
96	Sexual occupation
101	Truancy
105[a]	Uses alcohol /drugs

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assessing reception class children and to enable comparison of the factors with those reported by the authors of these scales and in the literature in general. Table 6 shows the names given to factors, their eigen values and percent of variance accounted for by each factor emerging from the CBQ, PBCL and TRF. The factor loadings are given in Table 7 to 9 for the CBQ, PBCL and TRF. Table 10 gives a summary of the factor subscales on each scale. The contents of the items in Tables 7 to 10 are given in an abridged form. (Please see Appendix 1 for details of item contents).

Table 6 shows that the largest amount of variance in each of the scales was consistently accounted for by the first factor, which comprised of 'conduct problems' (24.4% on the CBQ; 24% on the PBCL and 23.1% on the TRF). Table 10 shows that it included largely those behaviours that were externalising in nature, such as disobedience, defiance, difficult to manage, disturbs, fights, destroys property, teases, can't sit still or restless, etc. on each scale (see Tables 7 to 9 for loadings of items on factors in each scale).

The second factor of the CBQ and the PBCL consisted of behaviours that were internalising in nature and accounted for 12% and 13% of the variance respectively. On the CBQ, it was termed as 'fearful/worried' and included fearful, worried, unhappy, teary, solitary behaviours. On the PBCL, it was summarised as 'emotional/sensitive' and consisted of behaviours like being sensitive, miserable, fearful and complaining. On the TRF, similar behaviours loaded more clearly on the fourth and fifth factors, which were summarised as 'fearful/anxious' and 'depressed/lonely'. They accounted for about seven percent of the variance and contained behaviours such as being fearful, impulsive, anxious, worried and nervous; and feeling unloved, worthless, persecuted, jealous and lonely. The second factor on the TRF was 'inattentive'. It

Table 6

Factor Names, Their Eigenvalues And The Percent Of Variance Accounted For By Each Factor In CBQ, PBCL And TRF.

Factor	Eigen Value	Percent of Variance
CBQ (N=210)		
1. Conduct/ Aggressive	6.35	24.4
2. Fearful/ Worried	3.14	12.1
3. Misdemeanor	1.84	7.1
4. Restless/ Nervous	1.65	6.3
5. Speech problems	1.35	5.2
6. Physical Problems	1.23	4.7
7. Sphincter Problems	1.08	4.2
8. Truant	1.01	3.9
TOTAL	- -	67.9
PBCL (N=350)		
1. Conduct/ Aggressive	5.24	24.0
2. Emotional/ Sensitive	2.86	13.0
3. Social Withdrawal	1.51	6.9
4. Aimless/ Wanders	1.36	6.2
5. Wets/ Soils	1.14	5.2
6. Habits	1.01	4.6
TOTAL	- -	59.9
TRF (N=536)		
1. Conduct/ Aggressive	21.70	23.1
2. Inattentive	9.05	9.6
3. Fearful/ Anxious	5.69	6.1
4. Stubborn	3.50	3.7
5 Depressed/ Lonely	2.50	2.7
6. Unpopular	2.11	2.2
7. Nervous/ Withdrawn	1.85	2.0
8. Kleptomaniac	1.77	1.9
TOTAL	- -	51.3

Table 7

Factor Loadings[1] Of The Child Behaviour Questionnaire.

Items[2]	1	2	3	4	5	6	7	8
1. Restless	.49		.43	.44			.31	
2. Truants								.83
3. Fidgets	.48		.36	.42			.35	
4. Destroys	.75							
5. Fights	.79							
6. Not liked	.76							
7. Worries		.79						
8. Solitary	.39	.51			.32			
9. Irritable	.80							
10. Unhappy		.61				.32		
11. Twitches	.31	.33		.43			.31	
12. Sucks Thumb				.74				
13. Bites Nails				.77				
14. Absents						.73		
15. Disobedient	.68		.47					
16. Concentration	.32		.30		.46		.32	
17. Fearful		.81						
18. Fussy		.57						
19. Lies	.41		.73					
20. Steals			.72					
21. Wets/Soils							.79	
22. Complains Pains		.31				.73		
23. Tears		.53					.37	
24. Stutters		.39			.57			
25. Speech Dist.					.79			
26. Bullies	.83							

[1] Loadings less than 0.30 are not included in the table.

[2] Item contents are abridged

Table 8

Factor Loadings[1] Of The Preschool Behaviour Checklist

Items[2]	1	2	3	4	5	6
1. Activity	.55			.31		
2. Not liked by peers	.43	.36				
3. Wets				.75	.32	
4. Soils				.79		
5. Poor concentration	.57			.38		
6. Difficult to manage	.82					
7. Demands Attention	.49	.40				
8. Unclear speech				.51		-.43
9. Reluctant to speak			.77			
10. Tantrums	.41	.32		-.45		
11. Withdrawn from peers		.44	.57			
12. Whines/Complains	.43	.61				
13. Sensitive, easily upset		.76				
14. Bites,Kicks,Fights	.79					
15. Wanders aimlessly				.69		
16. Interferes in play	.79					
17. Miserable		.72				
18. Taunts,Teases	.76					
19. Withdrawn from staff			.77			
20. Destroys	.71					
21. Fearful		.46	.46			
22. Habits						.74

1 Loadings less than 0.30 are not included in the table.

[2] Item contents are abridged.

Table 9

Factor Loadings of The Teacher Report Form (TRF)

Item	1	2	3	4	5	6	7	8
1 Acts too young		.48						
2 Makes odd noises	.61							
3 Argues a lot	.67		.34					
4 Fails to finish things	.41	.68						
6 Defiant,talks back	.53		.44					
7 Bragging, boasting	.55							
8 Can't concentrate	.44	.74						
10 Can't sit still	.73	.35						
11 Clings to adults					.50			
12 Complains of loneliness					.62			
13 Confused		.69						
14 Cries a lot					.51			
15 Fidgets	.71	.33						
16 Cruel, bullies	.54		.38					
17 Day dreams		.64						
19 Demands attention	.65				.43			
20 Destroys own things								
21 Destroys property belonging to others	.57		.31					
22 Difficulty following direction		.74						
23 Disobedient	.71							
24 Disrupts others	.78							
25 Doesn't get along with others						.40		
26 Doesn't feel guilty after misbehaving	.61		.34					
27 Easily jealous	.32		.38		.41			
29 Fears certain animals							.46	
31 Fears impulses				.74				
32 Needs to be perfect				.69				
33 Feels unloved					.57			
34 Feels persecuted	.35		.32		.44			
35 Feels worthless					.48			
36 Accident-prone	.34					.35		
37 Fighting	.56		.40					
38 Is teased					.42	.51		
39 Hangs around	.55							
41 Impulsive	.74							
42 Likes to be alone							.44	.32
43 Lying cheating	.57							
44 Bites finger nails							.35	
45 Nervous, tense				.49			.34	
46 Nervous movements							.58	
47 Overconforms				.73				
48 Not liked						.52		.34
49 Difficulty learning		.73						
50 Fearful/anxious				.66				
53 Talks out of turn	.72							
54 Overtired		.38			.35			
56f Stomachaches					.37		.44	
57 Attacks others	.54		.43					
58 Picking	.33					.36		
60 Apathetic		.75						
61 Poor school work		.79						
62 Clumsy		.53				.42		
63 Prefers older children			.31					
64 Prefers younger children						.40	.32	
65 Refuses to talk		.51						
67 Disrupts class	.80							
69 Secretive		.39	.32	.32				.42
71 Self conscious				.63				
72 Messy work	.34	.65						
73 Irresponsible	.50		.32			.37		
74 Showing off	.75							
75 Shy or timid	-.34	.34		.52				
76 Explosive	.38		.59					
77 Easily frustrated	.51		.41		.30			
78 Inattentive	.49	.68						
79 Speech problems						.37		
80 Stares blank		.69						
81 Feels hurt				.48	.34			
82 Steals	.34							.49
83 Stores up unneeded things								.52
84 Strange behaviour						.40	.31	
86 Stubborn, irritable			.64					
87 Moody			.66					
88 Sulks a lot			.64					
89 Suspicious			.55					
90 Swearing	.30		.43			.32		
92 Underachieving	.34	.64						
93 Talks too much	.71							
94 Teases a lot	.49							
95 Temper tantrums			.74					
97 Threatens people	.32		.65					
99 Too concerned with cleanliness				.62				
100 Fails to carry out tasks	.41	.67						
102 Underactive		.62						
103 Unhappy, sad		.40			.36		.34	
104 Unusually loud	.63							
106 Anxious to please				.64				
108 Fears mistakes				.79				
109 Whining					.59			
110 Unclean		.35				.41		
111 Withdrawn		.42					.43	.38
112 Worrying				.56	.32			

Items loading less than 0.30 not included in the table.

Table 10

Summary Of The Items Loading On Each Of The Factors On The CBQ, TRF And PBCL

CBQ	TRF	PBCL
Factor - 1 Conduct/Aggressive	**Factor - 1 : Conduct/Aggressive**	**Factor - 1 Conduct/Aggressive**
Bullies, Destroys, Disobedient, Fidgets, Fights, Irritable, Lies, Not liked, Poor concentration, Restless, Solitary, Twitches.	Argues a lot, Attacks others, Boasts, Bullies, Can't sit still, Can't concentrates, Cruel, Defiant, Demands attention, Destroys others' property, Disobedient, Disrupts class, Disturbs, Doesn't feel guilty after misbehaving, Easily frustrated, Fails to finish things, Fails to carry out tasks, Fidgets, Fights, Hangs around, Impulsive, Inatentive, Irresponsible, Lies, Makes odd noise, Shows off, Talks too much, Talks out of turn, Teases a lot, Unusually loud.	Activity, Demands attention, Destroys, Difficult to manage, Fights, Interferes, Not liked by peers, Poor concentration, Teases, Whines/ Complains, Tantrums.
Factor - 2 : Fearful/Worried	**Factor - 2 : Inattentive**	**Factor - 2 : Emotional/Sensitive**
Complains pains, Fearful, Fussy, Solitary, Tears, Twitches, Unhappy, Worries.	Acts too young, Apathetic, Can't concentrate, Clumsy, Confused, Day dreams, Difficulty learning, Difficulty following directions, Fails to finish things, Fails to carry out tasks, Inattentive, Messy work, Overtired, Poor school work, Refuses to talk, Stares blankly, Underachieving, Underactive, Unhappy/ Sad, Worrying.	Demands attention, Fearful, Frequently miserable, Not liked by peers Sensitive, Tentrums, Whines/ Complains, Withdrawn from peers.
Factor - 3 : Misdemeanor	**Factor - 3 : Stubborn**	**Factor - 3 : Social Withdrawal**
Disobedient, Fidgets, Lies, Poor concentration, Restless, Steals.	Attacks others, Defiant, Easily frustrated, Explosive, Fights, Irritable, Moody, Prefers older children, Sulks a lot, Suspicious, Swearing, Temper tantrums, Threatens people.	Fearful, Reluctant to speak, Withdrawn from peers, Withdrawn from staff.
Factor - 4 : Nervous habits	**Factor - 4 : Fearful/Anxious**	**Factor- 4 : Aimless/Wanders**
Bites nails, Fidgets, Restless, Sucks thumb, Twitches.	Anxious to please, Fearful/ Anxious, Fears mistakes, Fears impulses, Feels hurt, Needs to be perfect, Nervous, Overconforms, Self-conscious, Shy, Too concerned with cleanliness, Worries.	Activity, Poor concentration, Unclear speech, Wanders aimlessly.
Factor - 5 : Speech problems	**Factor - 5 : Depressed/ Lonely**	**Factor - 5 : Wets/Soils**
Poor concentration, Solitary, Speech disturbance Stutters.	Clings to adults, Complains of loneliness, Cries a lot, Demand attention, Easily jealous, Feels persecuted, Feels worthless, Feels unloved, Is teased, Whines.	Soils, Wets.
Factor - 6 : Physical problems	**Factor - 6 : Unpopular**	**Factor - 6 : Habits**
Absents from school, Complains pains, Unhappy.	Accident prone, Clumsy, Unclean, Doesn't get along with others, Is teased, Not liked, Picking, Prefers younger children, Speech problems, Strange behaviour.	Habits (Nail biting, Thumb sucking, etc), Wets.
Factor - 7 : Sphincter problems	**Factor - 7 : Nervous/Withdrawn**	
Fidgets, Poor concentration, Restless, Tears, Twitches, Wets/ Soils.	Bites finger nails, Fears certain animals, Likes to be alone, Nervous movements, Stomach aches, Withdrawn.	———
Factor - 8 : Truant	**Factor - 8 : Kleptomaniac**	
Truants.	Secretive, Steals, Stores up unneeded things.	———

accounted for nine percent of the variance and included, school and attention related problems, for example, difficulties in following directions and learning, poor school work, cannot concentrate, not attentive, fails to carry out tasks, and underachieving . However, some internalising type behaviours like withdrawn, unhappy/sad also loaded on this factor.

The third factor on the PBCL was a clear 'social withdrawal' one and consisted of items such as reluctant to speak, withdrawn from staff and ignores others. Withdrawn behaviour in the TRF loaded with nervous movements and fears on the seventh factor called 'nervous/withdrawn' as well as with school related difficulties in the second factor. On the CBQ, the only item pertaining to withdrawn behaviour was, solitary, which loaded on the second 'fearful/worried' factor. The CBQ's third factor was 'misdemeanors', included behaviours such as lies, steals, restless and disobedient. The third of the TRF factors was called, 'stubborn' and consisted of behaviours resembling those in the first, conduct, factor- moody, tempers, threatens, stubborn, sulks, explodes, swears and suspicious.

Behavioural items in the fourth PBCL factors were summarised as 'wanders/aimless', included items such as, wanders aimlessly, stares in space and poor concentration. Similar items loaded together in the TRF also, but in combination with other school and attention related problems on the second factor. The CBQ's fourth factor was labelled as 'restless/nervous'. It included items like bites nails, sucks thumb, restless, twitches and fidgets. The fourth factor on the TRF was 'fearful/anxious' and somewhat resembled the CBQ's second 'fearful/worried' factor.

Each of the last two factors of the PBCL (5th and 6th), the last four of the CBQ (5th to 8th) and the last five of the TRF (4th to 8th) accounted for less than five percent of variance. On the PBCL, the 5th and the 6th factors were comprised of 'sphincter problems' and 'habits'. They included items such as: wets and soils; and habits respectively. On the CBQ, the 5th through 7th factors included 'speech', 'physical' and 'sphincter' problems. As with the PBCL, wets/ soils on the CBQ loaded on a separate factor. On the TRF, the fifth factor was 'depressed' and was somewhat like the PBCL's 'emotional/sensitive' factor. The sixth of the TRF factors was termed as 'unpopular' and included behaviours such as, not liked, clumsy, is teased, doesn't get along with others, prefers younger children and strange behaviour. The seventh factor on the TRF was 'nervous/withdrawn' and the eighth was 'kleptomaniac'. Most of the items on the last two of the TRF factors cross loaded on the other factors.

Despite variations in the number and content of the items on the three scales, the first largest factor on each of the scales was related to 'conduct problems'. Some similarity was found in other factors also. For example, 'emotional/sensitive' on the PBCL and 'depressed' on the TRF; and 'fearful/worried' on the CBQ and 'fearful/anxious' on the TRF included some similar items. Items related to sphincter problems were present only on the CBQ and the PBCL, and emerged as separate factors from the main frames of the scales in both the cases.

2.5.4 CBQ, PBCL and TRF factors- Their internal consistency and gender differences.

Table 11 shows that seven of the eight factors on the TRF had moderate to high internal consistency (Cronbach's Alpha= 0.62 to 0.95), but only four of the 8 CBQ

Table 11

CBQ, PBCL & TRF Factors- Internal Consistency & Gender Differences

Factor	Alpha	Boys Mean(SD)	Girls Mean(SD)	F Value (df)
CBQ				
N	210	114	96	(df=1,208)
1. Conduct/Aggressive	0.90	3.61(4.21)	1.94(3.38)	9.86**
2. Fearful/Worried	0.77	2.43(2.31)	2.13(2.45)	0.86
3. Misdemeanor	0.73	1.62(2.02)	0.82(1.48)	10.34**
4. Restless/Nervous	0.61	1.90(2.17)	0.93(1.36)	14.63***
5. Speech problems	0.42	1.10(1.19)	0.65(1.10)	8.33**
6. Physical Problems	0.42	0.35(0.70)	0.39(0.72)	0.12
7. Sphincter Problems	-	0.12(0.46)	0.11(0.38)	0.02
8. Truant	-	0.54(0.67)	0.36(0.55)	4.44
TOTAL	0.85			
PBCL				
N	350	174	176	(df=1,348)
1. Conduct/Aggressive	0.89	4.03(4.17)	2.48(3.26)	15.02***
2. Emotional/ Sensitive	0.70	1.75(1.98)	1.75(2.12)	0.00
3. Social Withdrawal	0.70	0.66(1.27)	0.74(1.22)	0.39
4. Aimless/ Wanders	0.62	1.96(2.12)	1.36(1.61)	8.60**
5. Wets/ Soils	0.15	0.02(0.13)	0.06(0.27)	2.9
6. Habits	0.15	0.14(0.41)	0.22(0.51)	2.8
TOTAL	0.83			
TRF				
N	536	275	261	(df=1,534)
1.Conduct/Aggressive	0.95	10.36(12.14)	5.19(8.22)	32.8***
2. Inattentive	0.94	7.89 (8.54)	4.33(6.79)	28.3***
3. Fearful/Anxious	0.88	1.74 (3.34)	1.14(2.30)	5.8***
4. Stubborn	0.87	2.78 (3.44)	3.24(4.39)	1.73
5 Depressed/Lonely	0.79	1.36 (2.30)	1.64(2.61)	1.73
6. Unpopular	0.75	1.61 (2.50)	0.94(1.73)	12.0***
7. Nervous/Withdrawn	0.62	0.77 (1.44)	0.74(1.32)	0.03
8. Kleptomaniac	0.43	0.36 (0.80)	0.37(0.78)	0.02
TOTAL	0.96			

** p <.01, *** p <.001.

factors had similar levels of consistency. On the PBCL, the first four of the six factors showed moderate to high consistency (Cronbach's Alpha = 0.62 to 0.89). Table 11 also shows that boys had significantly higher scores than girls on the conduct/aggressive factor of the three scales. They were also higher than girls in three other factors on the CBQ: misdemeanors; restless/nervous and speech problems; three other factors on the TRF: inattentive; unpopular and fearful/anxious; and one other factor on the PBCL: aimless/wanders.

2.5.5 Reliability of the CBQ, the PBCL and the TRF

Using Cronbach's Alpha, the internal consistency of the complete scales were examined. The alpha values of 0.96, 0.85 and 0.83 for the TRF, CBQ and PBCL respectively, indicated high internal consistency of each scale. Using the split- half method, Spearman- Brown's correlation was lower for the first half of the PBCL (0.67) as compared to its second half (0.75) but the reverse was true for the CBQ where the first half showed slightly higher consistency (0.81) as compared to its second half (0.65). Both halves of the TRF were equally consistent (0.93 and 0.92).

Tables 12 to 14 show correlations of items with total scores for the three scales. All items of the CBQ, all but two of the PBCL items and all but five of the TRF items were significantly correlated with their respective total scores. The items of the PBCL that did not correlate significantly with its total scores were wets and soils. The items of the TRF that did not correlate significantly with its total were skin problems, vomiting, and (unsurprisingly) suicidal talk, too concerned about cleanliness and uses alcohol.

Table 12

CBQ Items- Their Correlation With Total Scores & Ability To Distinguish Between Problem And Non-problem Groups Based On Cut-off Score Of Nine

Items	r[1]	t-value[2]
1. Restless	.65***	9.2***
2. Truants	.20**	2.7**
3. Fidgets	.70***	9.2***
4. Destroys	.70***	8.4***
5. Fights	.69***	7.6***
6. Not liked	.60***	7.7***
7. Worries	.40***	6.4***
8. Solitary	.49***	6.5***
9. Irritable	.59***	6.2***
10. Unhappy	.56***	7.7***
11. Twitches	.43***	4.9***
12. Sucks Thumb	.33***	5.3***
13. Bites Nails	.26***	3.0**
14. Absent	.28***	4.3***
15. Disobedient	.72***	9.1***
16. Concentration	.62***	8.0***
17. Fearful	.31***	4.4***
18. Fussy	.29***	3.6***
19. Lies	.53***	5.7***
20. Steals	.34***	3.4***
21. Wets/Soils	.19***	3.3***
22. Complains Pain	.30***	3.2***
23. Tears	.40***	6.3***
24. Stutters	.19*	3.6***
25. Speech Dist.	.26***	2.9**
26. Bullies	.59***	6.4***

[1] N=210, [2] N for problem group=71 & N for non-problem group=139

* p <.05, ** p <.01, *** p <.001

Table 13

PBCL Items- Their Correlation With Total Scores & Ability To Distinguish Between Problem And Non-problem Groups Based On Cut-off Score Of 12

Items	r[1]	t-value[2]
1. Activity	.59***	11.0***
2. Not liked by peers	.55***	8.4***
3. Wets	.12	3.3***
4. Soils	.12	2.5**
5. Lack of Concentration	.67***	11.4***
6. Difficult to manage	.61***	11.5***
7. Demands Attention	.57***	8.7***
8. Stutters,Stammers	.35***	6.1***
9. Will not speak	.29***	4.2***
10. Tantrums	.33***	5.9***
11. Withdrawn from peers	.34***	5.1***
12. Whines/Complains	.61***	10.6***
13. Sensitive	.38***	4.4***
14. Bites,Kicks,Fights	.60***	10.4***
15. Wanders aimlessly	.47***	7.0***
16. Interferes in play	.63***	10.8***
17. Miserable	.46***	6.3***
18. Taunts,Teases	.58***	9.4***
19. Withdrawn	.37***	4.6***
20. Destroys	.54***	9.9***
21. Fearful	.38***	5.7***
22. Habits	.33***	6.0***

[1] N = 350, [2] N for problem group = 50 & N for non-problem group = 300

** $p < .01$, *** $p < .001$.

Table 14

TRF Items- Their Correlation With Total Scores & Ability To Distinguish Between Problem And Non-problem Groups Based On Cut-off Scores

Item	r[1]	t-value[2]	Item	r[1]	t-value[2]
1 Acts too young	.58***	11.4***	56f Stomachaches	.24***	5.1***
2 Makes odd noises	.56***	12.3***	56g Vomiting	.02	-0.9
3 Argues a lot	.57***	12.0***	56h Others	.29***	3.9***
4 Fails to finish things	.68***	14.3***	57 Attacks others	.54***	9.6***
5 Behaves like opposite sex	.22***	3.9***	58 Picking	.41***	8.8***
6 Defiant,talks back	.45***	10.2***	59 Sleeps in class	.26***	3.9***
7 Bragging, boasting	.44***	9.4***	60 Apathetic	.55***	11.5***
8 Can't concentrate	.69***	12.6***	61 Poor school work	.66***	13.1***
9 Can't get his mind off certain things	.22***	4.0***	62 Clumsy	.54***	9.9***
10 Can't sit still	.65***	14.1***	63 Prefers older children	.36***	6.6***
11 Clings to adults	.32***	6.3***	64 Prefers younger children	.35***	6.3***
12 Complains of loneliness	.29***	7.8***	65 Refuses to talk	.37***	5.9***
13 Confused	.48***	8.1***	66 Compulsions	.19***	2.4**
14 Cries a lot	.27***	6.8***	67 Disrupts class	.67***	16.2***
15 Fidgets	63***	13.1***	68 Screams a lot	.40***	8.0***
16 Cruel, bullies	48***	9.4***	69 Secretive	.45***	7.2***
17 Day dreams	49***	8.4***	70 Sees things not there	.22***	2.1*
18 Deliberately harms self	36***	5.7***	71 Self conscious	.29***	3.6***
19 Demands attention	58***	15.9***	72 Messy work	.62***	11.7***
20 Destroys own things	44***	8.1***	73 Irresponsible	.56***	12.4***
21 Destroys property belonging to others	59***	13.3***	74 Showing off	.53***	12.0***
22 Difficulty following direction	59***	9.9***	75 Shy or timid	.15***	0.9
23 Disobedient	65***	16.2***	76 Explosive	.52***	11.9***
24 Disrupts others	69***	16.2***	77 Easily frustrated	.55***	12.7***
25 Doesn't get along with others	62***	13.5***	78 Inattentive	.71***	13.5***
26 Doesn't feel guilty after misbehaving	61***	14.5***	79 Speech problems	.25***	4.3***
27 Easily jealous	43***	9.6***	80 Stares blank	.53***	8.7***
28 Eats/drinks non foods	33***	5.7***	81 Feels hurt	.40***	7.5***
29 Fears certain animals	20***	2.6**	82 Steals	.34***	9.4***
30 Fears going to school	34***	5.9***	83 Stores up unneeded things	.32***	7.3***
31 Fears impulses	17***	3.3***	84 Strange behaviour	.48***	9.2***
32 Needs to be perfect	18***	2.8**	85 Strange ideas	.37***	5.5***
33 Feels unloved	38***	9.6***	86 Stubborn, irritable	.47***	10.5***
34 Feels persecuted	56***	12.7***	87 Moody	.49***	10.4***
35 Feels worthless	32***	7.3***	88 Sulks a lot	.42***	8.5***
36 Accident-prone	47***	8.8***	89 Suspicious	.40***	6.4***
37 Fighting	.56***	11.9***	90 Swearing	.47***	8.3***
38 Is teased	50***	10.4***	91 Suicidal talk	.01	1.5
39 Hangs around	.51***	9.7***	92 Underachieving	.63***	13.0***
40 Hears things	.34***	3.6***	93 Talks too much	.42***	7.5***
41 Impulsive	.61***	13.3***	94 Teases a lot	.35***	6.9***
42 Likes to be alone	.36***	5.3***	95 Temper tantrums	.44***	8.4***
43 Lying cheating	.50***	9.9***	96 Sexual occupation	.15***	3.4***
44 Bites finger nails	.31***	5.9***	97 Threatens people	.47***	8.7***
45 Nervous, tense	.45***	7.6***	98 Tardy	.37***	6.5***
46 Nervous movements	.33***	5.1***	99 Too concerned with cleanliness	.03	0.1
47 Overconforms	.13**	2.7**	100 Fails to carry out tasks	.68***	13.4***
48 Not liked	.54***	9.9***	101 Truancy	.32***	5.7***
49 Difficulty learning	.55***	9.5***	102 Underactive	.44***	7.5***
50 Fearful/anxious	.26***	4.3***	103 Unhappy, sad	.52***	13.2***
51 Dizzy	.18***	4.0***	104 Unusually loud	.48***	9.8***
52 Feels too guilty	.18***	3.9***	105 Uses alcohol/drugs	---	---
53 Talks out of turn	.50***	8.8***	106 Anxious to please	.14***	1.5
54 Overtired	.44***	8.3***	107 Dislikes school	.41***	9.5***
55 Overweight	.12**	2.4**	108 Fears mistakes	.21***	2.8**
56a Aches or pains	.19***	4.9***	109 Whining	.47***	11.5***
56b Headaches	.16***	4.2***	110 Unclean	.44***	8.9***
56c Nausea, feels sick	.17***	2.9**	111 Withdrawn	.42***	7.2***
56d Eye Problem	.11**	0.1	112 Worrying	.28***	5.5***
56e Skin problems	.01	1.1	113 Others	.20***	3.4***

[1] N=536 [2] N for problem group=72 & N for non-problem group=464

* p <.05, ** p <.01, *** p < 001.

To assess the reliability of the items on the three scales, the children were divided into two groups- problem and non- problem - based on whether they scored above or below the cut-off points given by the authors for each scale. The differences in the item mean scores of the two groups formed for each scale separately, were examined using the t-test. The results indicated that all items of the CBQ and the PBCL, and all but 20 of the TRF items discriminated between the two groups. The TRF items that did not differentiate between the groups were- needs to be perfect, fears impulses, prefers older children, is shy or timid, anxious to please, fears mistakes, worries, behaves like opposite sex, overconforms, overweight, eye or skin problems, headaches, vomiting, feels too guilty and too concerned with cleanliness. It may be noted that seven of these items were those that were marked for less than five percent children. Concentration and disobedience were among the five items differentiating most significantly between those above and below the cut-offs on PBCL, CBQ and TRF. The other three on each of these measures were: PBCL- activity, interferes with other's play and whines; CBQ- restless, fidgets and destroys; and TRF- strange behaviour, does not feel guilty after misbehaving and fails to carry out tasks.

2.5.6 Convergence of the TRF with CBQ and PBCL

All teachers completed the TRFs either in combination with the CBQs or the PBCLs for ten children each from their classes. The convergence between the CBQ/TRF and the PBCL/TRF was examined in three ways- by calculating Pearson's correlations between their total scores, by calculating the correlations between the factors that emerged from their factor analyses and by calculating the number of children above and below the cut-off points on each of the scales. Of the 350 PBCLs completed by teachers only 330 had a TRF counterpart and of the 210 CBQs only 170 had a TRF

counterpart. The analyses to assess the convergence between the CBQ/TRF and the PBCL/TRF were therefore performed only on those scales which were paired, that is 330 PBCLs and 170 CBQs. Table 15 shows the correlations between the total scores and the factors of the PBCL/CBQ with the TRF. Table 16 gives the agreement between the instruments in identifying children above and below the scales' cut-offs.

Table 15 shows that the TRF total scores were highly correlated with the totals for the PBCLs as well as the CBQs (0.83 and 0.76 respectively). Conceptually similar factors on these measures also showed high correlations. Table 15 also shows that the 'conduct/aggressive' factors of the PBCL and the CBQ had correlations of 0.83 and 0.81 with the TRF's 'conduct/aggressive' factor. Of the other factors, the 'aimless/wanders' and the 'emotional/sensitive' on the PBCL had high correlations (0.72 and 0.78) with the TRF's 'inattentive' and 'depressed/lonely' factors respectively. No other factors from the CBQ were as highly correlated with the TRF factors as the PBCL factors. However, the 'fearful/worried' on the CBQ had a correlation of 0.53 with the 'fearful/anxious' factor on the TRF.

The PBCL also showed a better agreement with the TRF in identifying children who presented emotional and behavioural problems in the clinical ranges as compared with the CBQ. Table 16 shows that of the 38 children above the TRF's cut-off point, 29 were above the cut-off on the PBCL as well, and of the 292 children below the cut-off on TRF, 272 were also below the PBCL cut-off point. This indicated an agreement of 91.2% between the PBCL and the TRF which, corrected for chance, was moderate (Cohen's kappa = 0.61). In the case of CBQ and TRF, the overall agreement was comparatively lower (80 percent, kappa= 0.44).

Table 15

Correlation[1] Of The TRF Factors With The CBQ And PBCL Factors.

	CBQ[2] (N = 170)					PBCL[3] (N = 330)				
TRF	1	2	3	4	T	1	2	3	4	T
Conduct/ Aggressive	<u>.81</u>	ns	<u>.77</u>	<u>.67</u>	.71	<u>.83</u>	.47	ns	.52	.72
Inattentive	.49	.37	.44	.43	.63	.60	.46	.42	<u>.72</u>	.71
Stubborn	.64	ns	.58	.34	.55	.59	.47	.16	.32	.54
Fearful/ Anxious	ns	<u>.53</u>	ns	ns	ns	ns	.44	<u>.47</u>	.24	.30
Depressed/ Lonely	.51	.41	.44	.40	.59	.55	<u>.78</u>	.27	.37	.62
Unpopular	.50	.35	.38	.36	.59	.56	.50	.31	.55	.64
Nervous/ Withdrawn	ns	.44	ns	.21	.39	.19	.32	.44	.37	.38
Kleptomaniac	.32	ns	.42	ns	.33	.37	.35	.25	.32	.43
TOTAL	.69	.38	.26	.51	<u>.76</u>	.76	.66	.38	.66	<u>.83</u>

[1] All correlations except those marked ns are significant at .01 level. [2] CBQ : 1=Conduct/ Aggressive, 2=Fearful/ Worried, 3=Misdemeanor, 4=Restless T=Total

[3] PBCL: 1=Conduct/ Aggressive, 2=Emotional/ Sensitive, 3=Socially Withdrawn, 4=Aimless/ Wanders, T=Total

[4] The underlined figures show the highest correlation in each column

Table 16

Agreement Of TRF With CBQ And PBCL In Selecting Children Below And Above Cut-off.

	TRF	
	> Cut-off	< Cut-off
> Cut-off	21	32
CBQ (N = 170)		
< Cut-off	2	115
> Cut-off	29	20
PBCL (N = 170)		
< Cut-off	9	272

80% agreement between TRF and CBQ (kappa =.44)

91.2% agreement between TRF and PBCL (kappa =.61)

2.5.7 Agreement of the CBQ, PBCL and TRF with teachers' Independent Judgements

The teachers provided an independent judgement about the children's behaviour on a three point global rating- definite, possible or no problem before they completed the formal assessments for the children. The agreements between teachers' views and the results of the formal assessments were examined using quantitative and categorical indices. Two quantitative measures were used: the first was by dividing the children into groups of definite, possible or no problems according to the teachers' judgements and testing the difference among their scores for each of the scales; and the second was by examining the extent of agreement between each item and the teachers' judgements. The categorical index included calculating the extent to which the children defined by the teachers as having or not having problems were designated into the same categories by the scales.

One way analysis of variance indicated that the scores on the CBQ, the PBCL and the TRF of children designated by teachers as showing definite, possible and no problems were significantly different ($F=145.7$ $df=2,533$ $p<.001$ for TRF; $F=138$, $df=2,347$ $p<.001$ for PBCL and $F=58.8$, $df=2,207$ $p<.001$ for CBQ). Table 17 shows that the children with definite problems had the highest scores on all the measures and those who did not present any problems in teachers' views had the lowest scores.

To examine the extent to which the teachers' global judgements agreed with the items of the scales in differentiating between problem and non-problem groups, the scores of children considered as showing definite problems and those considered as not showing problems were compared using t-test, separately for the three scales. Nine items on the CBQ did not distinguish between the problem and non-problem

Table 17

CBQ, PBCL And TRF Mean Scores- Differences In Groups Designated By Teachers As Definite, Possible & Non-problem.

Status	N	N Above Cut Off	Mean (SD)	F Value
CBQ				
Non-Problem	150	33 (22.0%)	4.84 (4.3)	
Possible Problem	44	26 (59.1%)	10.61 (5.8)	58.8*** (df 2,207)
Definite Problem	16	12 (75.0%)	17.34 (8.6)	
PBCL				
Non-Problem	256	11 (04.3%)	3.3 (3.4)	
Possible Problem	79	29 (36.7%)	9.6 (4.1)	138.0*** (df 2,347)
Definite Problem	15	10 (66.7%)	14.9 (6.4)	
TRF				
Non-Problem	391	18 (04.6%)	13.3 (15.2)	
Possible-Problem	115	34 (29.6%)	35.9 (19.6)	145.7*** (df 2,533)
Definite Problem	30	20 (66.7%)	59.6 (35.9)	

*** $p < .001$.

groups formed on the basis of the teachers' judgements (see Table 18). These items were- truants, worries, sucks thumb, bites nails, absents from school, is fussy, wets/soils, complains of pain and stutters. It may be noted that all these items discriminated between problem groups formed on the basis of the clinically derived cut-off given by the authors (see Table 12). Similarly four PBCL items- wets, soils, tempers and sensitive, and eight TRF items- eye and skin problems, vomiting, timid, suicidal, too concerned with cleanliness, uses alcohol and anxious to please- did not differentiate significantly between the two groups (see Table 19 and 20).

Table 21 shows that 66.6% of the children who were indicated as presenting definite problems by teachers in their informal assessments were above the cut-off points on the PBCL and the TRF. About 95% of those who were not considered as having problems were below the cut-off points of the PBCL and TRF. In the case of the CBQ, 75% of those who were viewed as showing problems and 78% of those who were thought not to show problems by the teachers were above or below the cut-off points respectively. The overall percentages of agreements corrected for chance between teachers' views and formal assessments were significant but low in the case of the CBQ (kappa= 0.29) and moderate for the PBCL and TRF (kappa=0.52 and 0.55 respectively). However, considering the possible problem category defined by teachers, agreements were generally low on all the measures. Using the possible problem criterion, fifty nine percent children were identified by the CBQ cut off, 37% by the PBCL cut off and 29.6% by the TRF cut off. This may be because there is no possible problem category on these instruments and children identified by teachers in the possible problem group may not have problems at the clinical level.

Table 18

CBQ Items Distinguishing Between Problem And Non-problem Groups Based On Teachers' Judgements

Items	t-value[1]
1. Restless	4.3***
2. Truants	2.0*
3. Fidgets	4.9***
4. Destroys	6.6***
5. Fights	6.7***
6. Not liked	8.2***
7. Worries	0.8
8. Solitary	6.4***
9. Irritable	6.6***
10. Unhappy	5.9***
11. Twitches	5.0***
12. Sucks Thumb	1.4
13. Bites Nails	0.2
14. Absents	1.1
15. Disobedient	9.2***
16. Concentration	4.5***
17. Fearful	3.5***
18. Fussy	1.5
19. Lies	5.1***
20. Steals	2.1*
21. Wets/Soils	1.8
22. Complains Pain	0.5
23. Tears	4.1***
24. Stutters	1.5
25. Speech Dist.	2.6**
26. Bullies	6.9***

[1] N=16 for problem group & N=150 for non-problem group.

* p <.05, ** p <.01, *** p< .001

Table 19

PBCL Items Distinguishing Between Problem And Non-problem Groups Based On Teachers' Judgements.

Items	t-value[1]
1. Activity	8.9***
2. Not liked by peers	4.9***
3. Wets	0.4
4. Soils	0.3
5. Poor Concentration	10.8***
6. Difficult to manage	8.1***
7. Demands Attention	5.1***
8. Stutters/ Stammers	3.4***
9. Will not speak	4.3***
10. Tantrums	1.5
11. Withdrawn from peers	3.6***
12. Whines/ Complains	4.5***
13. Sensitive	1.9
14. Bites,Kicks,Fights	4.4***
15. Wanders aimlessly	6.5***
16. Interferes in play	5.0***
17. Miserable	4.8***
18. Taunts,Teases	5.1***
19. Withdrawn	4.4***
20. Destroys	8.6***
21. Fearful	3.3***
22. Habits	3.3***

[1] N=15 for problem group, N=256 for non-problem group.

*** p< .001

Table 20

TRF Items Distinguishing Between Problem And Non-problem Groups Based On Teachers' Judgement

No. Item	t-value[1]	No. Item	t-value[1]	No. Item	t-value[1]	No. Item	t-value[1]
1 Acts too young	10.1***	34 Feels persecuted	6.3***	64 Prefers younger children	5.0***	101 Truancy	3.9***
2 Makes odd noises	8.9***	35 Feels worthless	2.8**	65 Refuses to talk	6.1***	102 Underactive	4.1***
3 Argues a lot	5.9***	36 Accident-prone	6.3***	66 Compulsions	2.9***	103 Unhappy, sad	7.3***
4 Fails to finish things	8.5***	37 Fighting	6.2***	67 Disrupts class	8.8***	104 Unusually loud	6.6***
5 Behaves like opposite sex	1.0	38 Is teased	7.8***	68 Screams a lot	9.8***	105 Uses alcohol/drugs	---
6 Defiant,talks back	5.9***	39 Hangs around	5.0***	69 Secretive	5.1***	106 Anxious to please	0.0
7 Bragging, boasting	3.1**	40 Hears things	5.3***	70 Sees things not there	3.1***	107 Dislikes school	6.5***
8 Can't concentrate	9.3***	41 Impulsive	7.3***	71 Self conscious	2.1*	108 Fears mistakes	1.0
9 Can't get his mind		42 Likes to be alone	4.1***	72 Messy work	7.9***	109 Whining	3.2**
off certain things	4.5***	43 Lying cheating	4.8***	73 Irresponsible	9.9***	110 Unclean	6.8***
10 Can't sit still	9.1***	44 Bites finger nails	2.8***	74 Showing off	5.2***	111 Withdrawn	8.5***
11 Clings to adults	4.7***	45 Nervous, tense	5.2***	75 Shy or timid	0.9	112 Worrying	1.8
12 Complains of loneliness	2.5**	46 Nervous movements	3.7***	76 Explosive	9.4***	113 Others	2.2*
13 Confused	8.3***	47 Overconforms	0.5	77 Easily frustrated	7.7***		
14 Cries a lot	4.7***	48 Not liked	9.2***	78 Inattentive	7.8***		
15 Fidgets	7.9***	49 Difficulty learning	9.0***	79 Speech problems	3.5***		
16 Cruel, bullies	5.7***	50 Fearful/anxious	1.1	80 Stares blank	7.7***		
17 Day dreams	6.3***	51 Dizzy	6.4***	81 Feels hurt	2.1*		
18 Deliberately harms self	6.1***	52 Feels too guilty	0.4	82 Steals	3.1**		
19 Demands attention	8.3***	53 Talks out of turn	5.9***	83 Stores up unneeded things	4.4***		
20 Destroys own things	6.4***	54 Overtired	5.7***	84 Strange behaviour	14.2***		
21 Destroys property		55 Overweight	0.2	85 Strange ideas	7.6***		
belonging to others	8.1***	56a Aches or pains	2.3*	86 Stubborn, irritable	6.0***		
22 Difficulty following direction	8.3***	56b Headaches	0.2	87 Moody	6.3***		
23 Disobedient	12.6***	56c Nausea, feels sick	2.4**	88 Sulks a lot	4.7***		
24 Disrupts others	9.3***	56d Eye Problem	0.9	89 Suspicious	5.6***		
25 Doesn't get along		56e Skin problems	0.7	90 Swearing	6.7***		
with others	9.7***	56f Stomachaches	3.8***	91 Suicidal talk	0.4		
26 Doesn't feel guilty		56g Vomiting	1.4	92 Underachieving	8.6***		
after misbehaving	12.7***	56h Others	7.5***	93 Talks too much	1.8		
27 Easily jealous	2.5**	57 Attacks others	6.9***	94 Teases a lot	2.4*		
28 Eats non-food	3.8***	58 Picking	4.5***	95 Temper tantrums	5.2***		
29 Fears certain animals	3.3***	59 Sleeps in class	5.1***	96 Sexual occupation	3.9***		
30 Fears going to school	6.7***	60 Apathetic	7.1***	97 Threatens people	6.7***		
31 Fears impulses	0.9	61 Poor school work	7.8***	98 Tardy	4.3***		
32 Needs to be perfect	0.4	62 Clumsy	9.0***	99 Too concerned with			
33 Feels unloved	3.4***	63 Prefers older children	0.6	cleanliness	0.5		
				100 Fails to carry out tasks	10.8***		

1:N Problem Group=30, N Non-problem Group =391

* p <.05, ** p <.01, *** p <.001

Table 21

Agreement Of Teachers With CBQ, PBCL & TRF In Designating Children Above Or Below Cut-off Score.

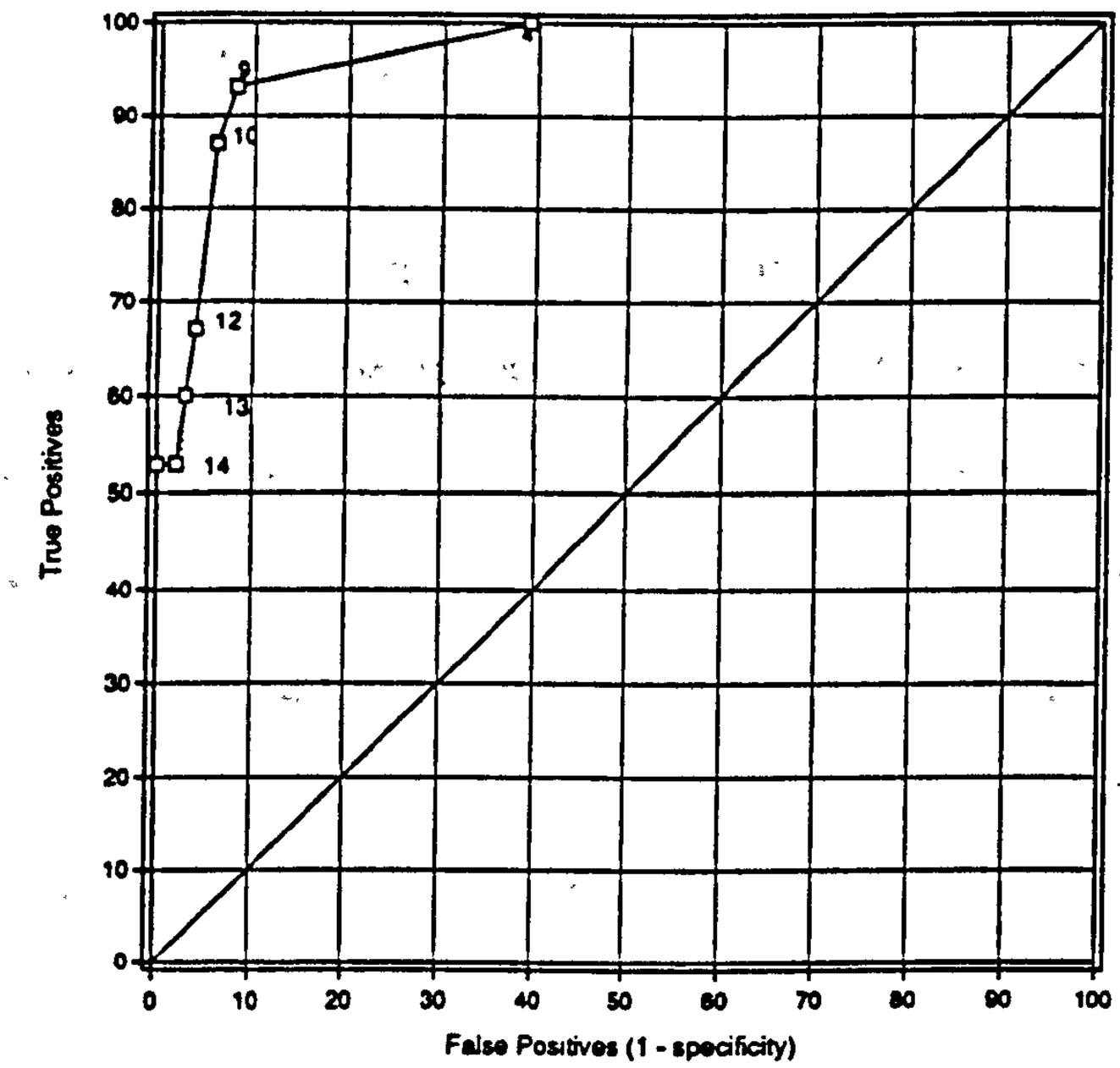
	Teachers	
	Definite Problem	Non-Problem
CBQ		
> Cut-off	12 (75.0%)	33 (22.0%)
< Cut-of	4 (25.0%)	117 (78.0%)
> Cut-off	10 (66.6%)	11 (4.3%)
PBCL		
< Cut-off	5 (33.3%)	245 (95.7%)
> Cut-off	20 (66.6%)	18 (4.6%)
TRF		
< Cut-off	10 (33.3%)	373 (95.4)

2.5.8 Efficiency of the CBQ and the PBCL at alternative cut-off scores.

The cut-off points of the CBQ and the PBCL were derived by their authors using clinical criteria. Fombonne (1991) has suggested three main considerations in the choice of an optimum cut-off score for instruments of this type : a balance between the sensitivity and specificity of an instrument, the expected prevalence rates of the problem and the purpose for which the cut-off point has to be used. The Receiver Operating Characteristic (ROC) method of analysis (Williams & Skuse, 1988; Murphy, et al, 1987; and Hanley & McNeil, 1983; 1982) has recently emerged as a statistical method for summarising and evaluating the performance of a scale at alternative cut-off points. Given a criterion, the ROC analysis curve enables an examination of all the potential cut-offs of a scale in a graphical form. It also makes the comparison of the complete performance of two or more scales easier. With the teachers' judgements as the criterion measure, the efficiency of the PBCL and the CBQ at the designated and other potential cut-offs was examined on the ROC analysis curve.

Figures 1 and 2 show the ROC curves plotted from the data obtained from the PBCL and CBQ. In the two figures, the *true positive*, or *sensitivity*, rate refers to the respective scale's accuracy in correctly classifying children identified as definite problems by teachers. The *specificity*, or the *true negative*, rate is the probability that non-problem children will be correctly identified as not having problems by the scales. The diagonal lines in Figures 1 and 2 signify an equal probability that a randomly chosen child would be designated as 'problem' or 'no problem' by the scales. In other words the discriminant ability of a scale is nil at this line. As the curve deviates from the diagonal line up towards the left corner of the box, it indicates increasing ability of a scale to discriminate correctly between problem and non- problem cases for a given

1. PBCL



2. CBQ

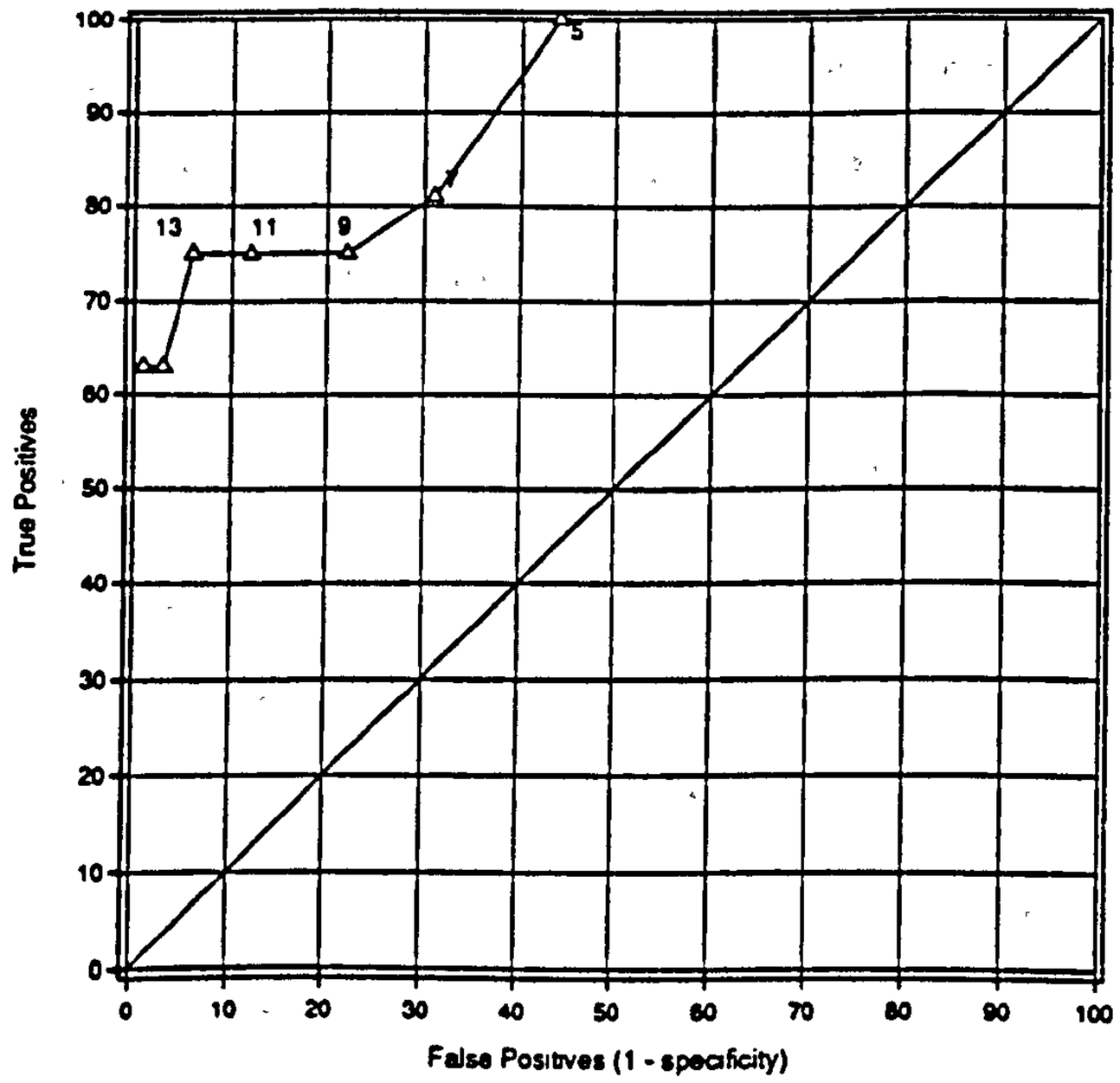


Figure 1 & 2: Receiver Operating Characteristic (ROC) Analysis Curve Drawn From The PBCL & CBQ Data

criterion, in this case teachers' judgements. So, the top left corner of the box shows perfect accuracy of the instrument.

The curves for the PBCL and the CBQ in Figures 1 and 2 show that they have generally performed well above chance level. The ROC curve for the PBCL (Figure 1) illustrates a higher sensitivity (93%) at a cut-off score of 9 than at 12 (66.6%), the cut-off designated by its authors. However, the gain in sensitivity at a score of 9 is at a slight loss of specificity which reduces from 95.7% to 92% as the cut-off point is moved down from 12 to 9. Since the specificity rate of 92% is within the conventional boundaries for a screening instrument, a score of 9 for the PBCL instead of 12 may seem more appropriate for some purposes. However, as Table 22 shows, one consequence of changing the cut-off point is the rise in prevalence rate for emotional and behavioural problems to 22% which may be considered high for general school populations. On balance, a cut-off of 10 seems to be more effective. As Table 22 shows, with 10 as the cut-off the sensitivity of the PBCL improves from 66.6% to 87% at the cost of only two percent loss in specificity.

Figure 2 shows that the sensitivity rate of 75% for the CBQ is static from a score of 9 to 13. However, its specificity improves considerably (from 78% to 94%) when the cut-off is raised from 9 to 13. As a consequence of the raised cut-off, the prevalence rate of the problems reduces from 33.8% to 16.6% which seems appropriate for a normative population and is comparable with the rate obtained from the TRF and the PBCL. A cut-off of 13 on the CBQ, therefore seems to be preferable for the reception class children. However, even with this change in the cut-off point, the CBQ remains less sensitive than the PBCL. No other score on the CBQ seems to result in a better sensitivity : specificity balance and prevalence rate for emotional and behavioural problems.

Table 22

Sensitivity And Specificity Of CBQ, PBCL And TRF With Teachers' Judgement As The Criterion Measure

Cut off point	Sensitivity (False Negatives)	Specificity (False Positives)	Prevalence Rate
CBQ			
9 and above	75.0% (25.0%)	78.0% (22.0%)	33.8%
11 and above	75.0% (25.0%)	88.0% (12.0%)	23.3%
13 and above	75.0% (25.0%)	94.0% (06.0%)	16.6%
PBCL			
12 and above	66.6% (33.3%)	95.7% (04.3%)	14.3%
10 and above	86.6% (13.3%)	94.0% (06.0%)	18.4%
9 and above	93.3% (6.7%)	92.2% (07.8%)	22.0%
TRF			
50 & 39 for Boys & Girls	66.6% (33.3%)	95.5% (04.5%)	13.4%
43 for Boys and Girls	66.6% (33.3%)	93.8% (06.2%)	16.0%

2.6 DISCUSSION

This study was designed to examine whether two selected instruments, the Child Behaviour Questionnaire, CBQ (Rutter, 1967), and the Preschool Behaviour Checklist, PBCL (McGuire & Richman, 1988) were suitable for screening for emotional and behavioural problems in reception class school children. These instruments were designed for contexts other than reception classes, so that the aim here was to examine their general measurement and psychometric properties resulting from their use in school reception classes. Since a choice was to be made between the CBQ and the PBCL for further evaluation in India, the Teacher Report Form (TRF) (Achenbach & Edelbrock, 1986) was used as a standard reference point for the CBQ and the PBCL. The measures derived from the use of the CBQ and the PBCL were compared with those derived from the use of the TRF.

Both the instruments stemmed from a clinical background, therefore, another aim was to consider if teachers' independent views of which children presented emotional and behavioural problems corresponded with the measures derived from the use of the scales. Several criteria were set up to compare the suitability of the two scales and so enable a choice between the two. The TRF was not being considered as a screening instrument here but the findings resulting from its use were compared with the teachers' independent judgements and with those reported by its authors in the United States for the sake of theoretical interest.

The factor structures of the three scales were examined using principal components analyses with varimax rotations. The PBCL's analysis identified six factors similar to those reported by McGuire and Richman (1986), indicating that in reception classes,

it did measure the behavioural variables that it was designed to measure. A summary comparison of the factor structure reported by McGuire and Richman and this study is given in Table 23. The first two factors 'conduct problems' and 'emotional/sensitive' found in this analysis were almost identical with those reported by McGuire and Richman. Eight of the 11 and five of six items on these two factors were the same. The third factor in the present findings was 'social withdrawal'. Only two items, withdrawn from staff and reluctant to speak loaded on a 'social withdrawal' factor in the original analysis, whereas here this factor took over two additional items- withdrawn from peers and fearful- making it clearer and more reliable. The fourth factor- 'aimless/wanders' also showed an overlap with the McGuire and Richman's standardisation factor with a difference of only one item, although they gave it a different name - 'immature/isolated'. Wets and soils emerged as separate from the main body of the PBCL items here as well as in the original analysis. Jackson (1989) also identified similar factors from the use of PBCL in a separate London study of reception class children. Table 23 also shows broad similarity between five of the six factors found in this study and those reported by Jackson (1989).

The main difference in the structure found in this study and the one reported by McGuire and Richman (1986) was that 'aggressive' did not emerge here as a separate factor. This difference, however, was consistent with findings reported by others who have identified combined conduct-aggressive factors using the PBCL (Jackson, 1989 and Luk et al., 1991*a*) and other instruments on children of different ages and nationalities (Achenbach & Edelbrock, 1979; 1983; 1986; Achenbach, Verhulst, Baron & Althaus, 1987).

Table 23

Similarity Of The PBCL Factors Found In Study One, McGuire & Richman (1986), And Jackson (1989)

Study One	McGuire & Richman (1986)	Jackson (1989)
Conduct/Aggressive Activity, Demands attention, Destroys, Difficult to manage, Fights, Interferes, Not liked by peers, Poor concentration, Tantrums, Teases, Whines/ Complains.	**Conduct/Restless** Activity, Destroys, Difficult to manage, Fights, Interferes, Not liked by peers, Poor concentration, Tantrums, Unclear speech.	**Conduct/Aggressive** Demands attention, Destroys, Difficult to manage, Fights, Interferes, Not liked by peers, Poor concentration, Tantrums, Teases, Whines/complains.
Emotional/Sensitive Demands attention, Fearful, Frequently miserable, Not liked by peers, Sensitive, Whines/ Complains.	**Emotional/Miserable** Demand attention, Fearful, Frequently miserable, Sensitive, Tantrums, Whines/ Complains.	**Emotional/Sensitive** Demand attention, Fearful, Habits, Frequently miserable, Sensitive, Tantrums, Whines/ complains.
Social Withdrawal Fearful, Reluctant to speak, Withdrawn from peers, Withdrawn from staff.	**Social Withdrawal** Reluctant to speak, Withdrawn from staff.	**Social Withdrawal** Fearful, Not liked by peers, Reluctant to speak, Unclear speech, Wanders aimlessly, Withdrawn from staff, Withdrawn from peers.
Aimless/Wanders Activity, Poor concentration, Unclear speech, Wanders aimlessly, Withdrawn from peers.	**Isolated-Immature** Poor concentration, Reluctant to speak, Unclear speech, Wanders aimlessly, Withdrawn from staff.	**Restless** Activity, Demands attention, Poor concentration, Wanders aimlessly.
Sphincter Problems Soils, Wets.	**Sphincter Problems** Soils, Wets.	**Developmental Problems** Unclear speech, Wets.
Habits Habits (thumb sucking, nail biting, etc), Wets.	**Aggressive** Destroys, Fights, Interferes, Whines/ complains.	**Factor-6 (Name not given)** Soils, Tantrums.

The order of factors is as they emerged in analysis of Study One. The item contents are arranged in alphabetical order in each column and are abridged.

Eight factors were identified from the analyses of the CBQ. Four of these factors were weak, accounting for only 18 of the 68 percent explained variance and had low internal consistency. Ten of the 26 items of the CBQ cross loaded on more than one factor. Rutter (1967) designed the CBQ to measure two conceptual dimensions- antisocial and neurotic, of emotional and behavioural problems. Unlike the present study, Venables et al. (1983) reported these dimensions to emerge empirically in their use of this scale on 7-8 years old children in the island of Mauritius. However, McGee et al (1985) identified six factors from its use in New Zealand on seven year olds after dropping three items- truants, tears on arrival at school, and wets- quoted for less than five percent of children. Table 24 shows a comparison of the factors obtained in the present study with those reported by McGee et al. (1985, see Appendix 1 for complete factor structure reported by them). Their first factor, 'aggressive-antisocial' was somewhat similar to the 'conduct/aggressive' factor found here. The second 'fearful/worried' factor identified in the present study was also similar to the 'anxious/fearful' factor reported by them. Five items forming this factor were common. These two factors of the CBQ were also broadly similar to the two factors reported by Venables et al. (1983), to two of the three factors identified by Fowler and Park (1979) and by Behar (1974) using a modified form of the CBQ with preschool children.

McGee et al. (1985) identified a separate factor of hyperactivity which loaded on being restless, squirmy and having poor concentration, these items were combined with the first 'conduct/aggressive' factor in the findings here. This inconsistency, however, is not specific to the use of the CBQ in this study. It reflects a general debate in the literature on whether or not hyperactivity and conduct problems exist as separate factors. Hinshaw (1987) from a review of 60 studies concluded that the studies were divided on the existence of these two as separate factors. Taylor (1984) suggested

Table 24

Similarity Of The CBQ Factors Found In Study One And McGee, et al (1985)

Study One	McGee, et al (1985)
Factor - 1 : Conduct/Aggressive	**Aggressive/Antisocial**
Bullies, Destroys, Disobedient, Fidgets, Fights, Irritable, Lies, Not liked, Poor concentration, Restless, Twitches.	Bullies, Destroys, Disobedient, Fights, Irritable, Not liked, Worries.
Factor - 2 : Fearful/Worried	**Anxious/Fearful**
Fearful, Fussy, Solitary, Tears, Twitches, Unhappy, Worries.	Complains pains, Fearful, Fussy, Not liked, Solitary, Unhappy, Worries.
Factor - 3 : Misdemeanor	**Hyperactivity**
Disobedient, Fidgets, Lies, Poor concentration, Restless, Steals.	Poor concentration, Disobedient Fidgets, Restless.
Factor - 4 : Nervous Habits	**No Match**
Bites nails, Fidgets, Restless, Sucks thumb, Twitches.	
Factor - 5 : Speech Problems	**No Match**
Poor concentration, Solitary, Speech disturbance, Stutters.	
Factor - 6 : Physical Problems	**No Match**
Absents from school, Complains pains, Irritable.	
Factor - 7 : Sphincter Problems	**No Match**
Restless, Tears, Truants, Wets/ Soils.	
Factor- 8 : Truants	**No Match**
Truants.	
No Match	**Factor - 4 : (Name not given)**
	Destructive, Lies, Steals.
No Match	**Factor - 5 : (Name not given)**
	Stutters, Twitches.
No Match	**Factor - 6 : (Name not given)**
	Bites nails, Sucks thumb.

The order of factors is as they emerged in analysis of Study One. The item contents are arranged in alphabetical order in both columns and are abridged.

halo effects in teachers' ratings as a possible cause for a high correlation between the aggressive and hyperactivity factors. Since hyperactivity did not emerge as a separate factor in the use of any of the scales here, the results of the CBQ show convergence within the study. Similar combined conduct-aggressive- activity factors have also been reported by others using other instruments on school populations (Luk, et al, 1988; Boyles and Jones, 1985).

No other factors found in this study had any clear correspondence with McGee et al.'s factors. The last three of their six factors were weak, two item factors. The last four factors in the present study were also one or two item factors and included several weak crossloadings of items which loaded more strongly on the other factors. The lack of a robust factor structure for the CBQ in this study may to some degree be associated with the size of the sample (N=210). However, it is unlikely that this was the reason, because McGee et al. (1985) analysed 940 CBQs and the structure in their sample showed similar weaknesses. The skew in the present data might be another reason, but McGee et al. (1985) found that the application of logarithmic transformation to normalise similarly skewed scores did not alter their findings.

The TRF consists of 113 items. Many of the behaviours are likely to occur rarely in ordinary school children but nonetheless match the diagnostic and clinical purposes of the scale. In the present study, 24 of the items were endorsed for less than five percent of children by teachers and were therefore dropped from principal components analyses. Eight of these items were also dropped by the authors in the original analyses on the same pretext. There are several reasons why the present factor structure is not directly comparable with the original analyses by Achenbach and Edelbrock (1986). First, the difference created in the content of the TRF by dropping

a larger number of items in the present analysis, may be a consideration. A possible second is the nature of the sample, since Achenbach and Edelbrock's reported structure was based on a clinical sample whereas the subjects here were ordinary school reception class children. Another important reason which restricted direct comparison of the two factor structures was that Achenbach and Edelbrock identified separate factors for boys and girls. Apart from the present writer's concern about making this sex-based discrimination in the structure of problems shown by children, the number of TRFs available in the present study did not permit doing separate analyses on subgroups of boys and girls. Even so, there were similarities in the factors obtained here with those reported by Achenbach and Edelbrock (1986) for 6-11 year olds (Table 25). The first largest factor- 'conduct/aggressive'- was virtually overlapping with 20 of the same items strongly loading on this factor in the two studies. Of the other seven factors, two ('inattentive' and 'fearful/anxious') had counterparts here in the factors for boys as well as girls. The 'depressed' factor had a correlate only in 6-11 year old girls in the original report and 'unpopular' had a counterpart in 6-11 year old boys. The 'social withdrawal' factor reported by Achenbach and Edelbrock emerged in this study as 'nervous/withdrawn'. Their 'self- destructive' and 'obsessive-compulsive' factors did not emerge in this study, perhaps because of the non-clinical nature of the present sample. However on the whole, the emergence of clear 'conduct/aggressive', 'inattentive', 'fearful/anxious', 'depressed' and 'withdrawn' factors from the present use of the TRF indicate that it measured here the variables which are considered to be important components of the constellation of emotional and behavioural problems (Achenbach & Edelbrock, 1978).

Further analyses involved exploring the convergent validity of the CBQ and the PBCL with the TRF as the criterion. The total scores of children on the PBCL and the total

Table 25

Similarity Of The TRF Factors Found In Study One And Achenbach & Edelbrock (1986).

Study One	Achenbach & Edelbrock (1986)	
(For Boys & Girls)	**(For Boys)**	**(For Girls)**
Conduct/Aggressive	**Aggressive**	**Aggressive**
Argues, Attacks, Boasts, Bullies, Can't sit still, Can't concentrates, Demands attention, Defiant, Destroys others' things, Disobedient, Disrupts class, Disturbs others, Doesn't feel guilty after misbehaving, Easily frustrated, Fails to finish things, Fails to carry out tasks, Fidgets, Fights, Hangs around, Impulsive, Inattentive, Irresponsible, Lies, Makes odd noises, Shows off, Talks too much, Talks out of turn, Teases a lot, Unusually loud.	Acts irresponsibly, Argues, Attacks people, Bad friends, Boasts, Cruelty, Defiant, Demands attention, Destroys own things, Destroys others' things, Disobedient, Disrupts class, Disturbs others, Easily frustrated, Explosive, Feels persecuted, Fidgets, Fights, Impulsive, Easily jealous, Lacks guilt, Lyies, Moody, Not liked, Poor peer relations, Screams, Shows off, Steals, Stubborn, Sulks, Suspicious, Swearing, Talks too much, Talks out of turn, Teases, Temper tantrums, Threatens. Unusally loud,	Argues, Attacks people, Bad friends, Boasting, Cruelty, Defiant, Demands attention, Destroys others' things, Destroys own things, Disobedient, Disrupts class, Disturbs others, Easily frustrated, Explosive, Feels persecuted, Fights, Hums, Impulsive, Jealous, Lacks guilt, Lies, Moody, Poor peer relations, Screams, Shows off, Stubborn, Sulks, Suspicious, Swearing, Talks out of turn, Talks too much, Teases, Temper tantrums, Threatens. Unusally loud.
Inattentive	**Inattentive**	**Inattentive**
Acts too young, Apathetic, Can't concentrate, Clumsy, Confused, Day dreams, Difficulty learning, Difficulty following directions, Fails to finish things, Fails to carry out tasks, Inattentive, Messy work, Overtired, Poor school work, Refuses to talk, Stares blankly, Underachieving, Underactive, Unhappy/Sad, Worrying.	Acts too young, Apathetic, Can't follow directions, Can't concentrate, Clumsy, Confused, Daydreams, Difficulty learning, Disturbs others, Fails to carry out tasks, Fails to finish things, Fidgets, Hums, Inattentive, Irresponsible, Messy work, Overtired, Poor schoolwork, Stares blankly, Underachieving, Underactive.	Acts too young, Apathetic, Can't follow directions, Can't concentrate, Confused, Daydreams, Demands attention, Difficulty learning, Fails to carry out tasks, Fails to finish things, Fidgets, Hyperactive, Inattentive, Irresponsible, Messy work, Overtired, Poor schoolwork, Stares blankly, Talks too much, Underachieving.
Stubborn	**No Match**	**No Match**
Attacks Others, Defiant, Easily frustrated, Explosive, Fights, Irritable, Moody, Prefers older children, Sulks a lot, Suspicious, Swearing, Temper tantrums, Threatens people.		
Fearful/ Anxious	**Anxious**	**Anxious**
Anxious to please, Fearful/ Anxious, Fears mistakes, Fears Impulses, Feels hurt, Needs to be perfect, Nervous, Overconforms, Self-conscious, Shy, Too concerned with cleanliness, Worries.	Anxious to please, Anxious, Clings to adults, Fears mistakes, Fears own impulses, Feels hurt, Feels worthless, Feels guilty, Needs to be Perfect, Overconforms, Secretive, Self-conscious, Shy, Too concerned with cleanliness, Worrying.	Anxious, Anxious to please, Clings to Adults, Fears own mistakes, Fears, Fears own impulses, Feels hurt, Feels guilty, Feels worthless, Needs to be perfect, Nervous, Overconforms, Sad, Self-conscious, Shy, Too concerned with cleanliness, Worrying.

...Continued

Table 25 continues...

Study One (For Boys & Girls)	Achenbach & Edelbrock (1986) (For Boys)	For Girls
Depressed	No Match	Depressed
Clings to adults, Complains of loneliness, Cries a lot, Demand attention, Easily jealous, Feels persecuted, Feels worthless, Feels unloved, Is teased, Whines.		Accident prone, Clings to adults, Cries, Feels worthless, Feels hurt, Feels unloved, Feels persecuted, Jealous, Lonely, Moody, Sad, Sulks, Suspicious, Whining, Worrying.
Unpopular	Unpopular	Unpopular
Accident prone, Clumsy, Doesn't get along with others, Is teased, Not liked, Picking, Prefers younger children, Speech problems, Strange behaviour, Unclean.	Acts too young, Clings to Adults, Feels worthless, Feels unloved, Feels persecuted, Is teased, Lonely, Poor peer relations, Prefers young kids, Not liked.	Feels persecuted, Fights, Is teased, Poor peer relations, Unclean appearance, Not liked.
Nervous/ Withdrawn	Social Withdrawal	Social Withdrawal
Bites finger nails, Fears certain animals, Likes to be alone, Nervous movements, Stomach aches, Withdrawn.	Apathetic, Likes to be alone, Sad, Secretive, Shy, Underactive, Stares blankly, Stubborn, Sulks, Withdrawn, Won't talk.	Apathetic, Daydreams, Likes to be alone, Sad, Secretive, Shy, Underactive, Stares blankly, Withdrawn, Won't talk.
Kleptomaniac	No Match	No Match
Secretive, Steals, Stores up unneeded things		
No Match	Self-destructive	Self-destructive
	Accident prone, Clumsy, Destroys own things, Destroys others' things, Eats nonfood, Fears, Feels guilty, Harms self, Nail biting, Picking, Strange behavior, Suicidal talk, Unclean.	Destroys own things, Eats nonfood, Eye problems, Harms self, Hoarding, Hums, Picking, Suicidal talk.
No Match	Obsessive-Compulsive	No Match
	Compulsions, Confused, Eats nonfood, Hums, Nervous movements, Obsessions, Stares blankly, Strange ideas, Strange behaviour.	
No Match	Nervous-Overactive	Nervous-Overactive
	Fidgets, Hoarding, Hyperactive, Messy work, Nail biting, Nervous, Nervous movements.	Fidgets, Hums, Hyperactive, Impulsive, Nervous, Nervous movements, Talks too much.

The order of factors is as they emerged in Study One. The items are given in alphabetical order and are abridged.

on the CBQ were highly correlated with the totals on the TRF (0.83 and 0.76 respectively). Since the scales have only a few near- equivalent items the composition of factors on each scale was somewhat different, but the factors which broadly resembled each other were correlated. While the factors denoting externalising behaviours on the PBCL and the CBQ were highly correlated with similar factors on the TRF, the correlation for the internalising type of factors was higher between the PBCL and TRF than between the CBQ and TRF. For instance, the correlation between 'emotional/sensitive' on the PBCL and 'depressed' on the TRF was 0.78 as compared with 0.41 between 'fearful/worried' on the CBQ and 'depressed' on the TRF; and 0.53 between 'fearful/worried' on the CBQ and 'fearful/anxious' on the TRF. The 'inattentive' factor on the TRF was also highly correlated with 'aimless/wanders' of the PBCL (0.72). There was no similar factor on the CBQ but its 'restless/nervous' factor showed a correlation of 0.44 with 'inattentive' of the TRF. The higher correlations of the PBCL factors with those of the TRF than the CBQ are interesting because both the CBQ and the TRF were designed for school populations, whereas the PBCL was developed for preschool settings. Lower correlations between internalising factors of the CBQ and the TRF are somewhat similar to the findings reported by Fombonne (1989). Fombonne compared the parent version of the CBQ - scale A2 (Rutter et al., 1981) with the parent version of the TRF - CBCL (Achenbach and Edelbrock, 1983). He found correlations for similar externalising items such as, steals, disobedience and destroys on the two scales, to range between 0.71 to 0.85, whereas correlations for similar internalising items such as tears on arrival at school, fearful were 0.48 and 0.50.

The PBCL also showed better convergence with the TRF in determining which children showed problems and which did not, in terms of scoring above the cut-off

points on the respective scales. The percentages of agreement corrected for chance in defining children as problem or non-problem cases were better between the PBCL and the TRF (kappa=0.61) than between the CBQ and TRF (kappa=0.41), although as such the agreement between PBCL and TRF was only moderate. Taking into account the differences in the number of items in the scales, the agreement between the TRF and the PBCL seems to be reasonable. Also considering that even if the same instrument was administered twice at an interval of two weeks, the agreements would not be perfect (McGuire and Richman, 1986), the findings here convey good convergence between the PBCL and the TRF.

When the internal consistencies of the scales were examined, all three showed high internal consistency. Reliability is a central issue in measurement and one important way to assess the repeatability of a measure is to employ the test- retest procedure. However, the various estimates of the reliability of the scales available for emotional and behavioural problems research are not always comparable (Boyles & Jones, 1985). Some aspects which preclude direct comparisons of reliability coefficients are: the unequivalence of time intervals between measures, the computation of different reliability coefficients by different researchers or the reliance on the information provided by the raters. In the present study, the teachers completed two scales for each child, so it was impracticable to ask them to complete a re-test for each of the scales. However, the protocol in the study made it possible to compute correlations between the PBCL/CBQ and TRF measures obtained two weeks apart. The correlation between the PBCL and TRF found to be 0.83, was comparable with the test-retest reliability of the PBCL as well as the TRF (0.88 for PBCL, McGuire & Richman, 1988; and 0.89 for TRF, Achenbach & Edelbrock, 1986). The equivalent coefficient between

the CBQ and the TRF was 0.76, slightly lower than 0.89, the re-test reliability for the CBQ reported by Rutter (1967).

Using the cut-offs given by the authors of each scale, the prevalence rates of emotional and behavioural problems were investigated. The CBQ yielded the highest rate of prevalence- 33.8%, followed by 14.3% on the PBCL and 13.4% on the TRF. The rate estimated by CBQ was high both in comparison to the TRF and compared to the rate reported by other studies on reception class children and similar age groups. The rates obtained from the PBCL on the other hand were more consistent with those of the TRF and those given by others. For instance, Jackson (1989) using the PBCL identified 15% of reception class children as having emotional and behavioural problems. Hughes et al. (1979) found approximately 13% of children to have general difficulties coping at the time of school entry. Chazan and Jackson (1971) reported 13-14% young school children to show signs of problems that required extra help.

The CBQ has been used in epidemiological and other studies. In the Isle Of Wight study, using the CBQ and its version meant for parents, Rutter et al. (1970) identified 13% of school children as having emotional and behavioural problems. In another study, using the CBQ, Rutter et al. (1975*a*) found 19% of children in inner London and 11% of children in the Isle of Wight to be above the recommended cut-off point. It is not clear why this scale resulted in as high as 33.8% rate of prevalence in the present study. Apart from the deciding criteria, the prevalence rate of the problems is likely to be affected by the size, composition, proportion and nature of the population studied. It is puzzling why these factors affected the results obtained from the CBQ and not those of the PBCL and the TRF in this study. It is possible that the smaller number of

subjects in the CBQ analyses was responsible (210 against 536 TRFs and 350 PBCLs). A further consideration may be that the CBQ was standardised on an older age group (9 to 13 years), and the children in other studies, for example in those mentioned above by Rutter and colleagues (1970; 1974) were ten year olds as compared with the five to six year olds in the present study.

Using all the scales, more boys than girls showed emotional and behavioural problems in the reception classes, a finding which is in line with several studies across different nations (Rutter, 1970 in Britain; McGee et al., 1985 in New Zealand; Achenbach & Edelbrock, 1981 in United States; Weisz, Suwanlert, Chaiyasit, Weiss, Achenbach, & Trevathan, 1989 in Thailand). The scores of boys were consistently higher than girls on externalising factors on the CBQ, PBCL and TRF. In general, there were no gender differences on the internalising factors of any of the instruments except the 'anxious/fearful' factor on the TRF. While the finding that boys show more externalising behaviours than girls is common, that they were significantly higher than girls on an internalising factor is inconsistent with findings reported by Rutter, et al (1975), who using the CBQ found that London girls presented more internalising problems than boys. The difference in findings may be explained by the number and nature of items in the instruments used.

Since the scales being examined here stemmed from a clinical framework, a central aim of the study was to find the correspondence between the teachers' view of emotional and behavioural problems and the measures derived from the instruments being used. All three scales showed a high convergence in identifying the groups of children defined by teachers as definite, possible or no problem cases. When the agreements between the teachers and the scales were examined at the level of

individuals, the agreements, corrected for chance, were low to moderate in defining children as having or not having problems. The CBQ had the lowest agreement (kappa=0.29) with teachers and the TRF and PBCL showed almost equal agreements (0.55 and 0.52).

The Receiver Operating Characteristic (ROC) analysis was used to examine the criterion score which maximised the efficiency of the CBQ and the PBCL in relation to teachers' judgements. McGuire and Richman (1986) designated a cut-off score of 12 which resulted in a PBCL sensitivity and specificity rate of 67% and 96% respectively, and 14% children were identified as having emotional and behavioural problems at this cut-off point. Lowering the cut-off from 12 here, helped to improve the PBCL's sensitivity but at the cost of reducing its specificity. However, at a screening level, it is preferable to have a higher rate of sensitivity than specificity, as it is better to falsely select non- problem cases as having problems (and to reject them at a second, more exhaustive, stage), than to miss the problem cases. Reducing the PBCL cut-off to 9 resulted in the best sensitivity and specificity ratio but classified a high number of children as having emotional and behavioural problems. A score of 10 provided the best combination of sensitivity/specificity and prevalence rates and was therefore selected as optimum for the reception class context.

At its designated cut-off score of 9, the CBQ showed a sensitivity of 75% and specificity of 78% and classified 33.8% children as above the cut-off point. The ROC curve indicated that lowering the CBQ cut-off would further reduce its specificity. In contrast to the PBCL where lowering its cut-off point improved its efficiency, raising the CBQ cut-off point showed similar effects on its efficiency. With the cut-off point raised from 9 to 13, the sensitivity remained 75% but specificity increased to 94% and the

prevalence rate reduced to 16.6%. The ROC curve also indicated that raising the cut-off point beyond 13 would result in reduced sensitivity. A CBQ cut-off score of 13 was therefore selected as optimum for the CBQ for screening reception class children. It is noteworthy that the PBCL score of 10 and the CBQ score of 13, selected as optimum in each case, correspond in being one standard deviation above their respective mean scores. The efficiency of the PBCL and the CBQ at alternative cut-off points could not be compared with similar indices from the TRF as, unlike the PBCL and the CBQ, it has separate cut-off points for boys and girls. However, when the performance of the PBCL and the CBQ was compared, the PBCL performed better than the CBQ even at the revised and statistically corresponding (mean + 1 SD in both cases) scores. The findings from inspection of the alternative cut-offs also suggested that the teachers agreed better with the statistical criterion in defining children who definitely had a problem than with the clinical criterion.

It is worthwhile to point out that the PBCL contains the fewest items of the three instruments, and that sampling a large number of items, especially of clinical relevance, may not improve the efficiency of the scales as a screening instrument, at least in the first year of school.

On the whole then, the findings from factorial validity, convergent validity, internal consistency, agreement with teachers, prevalence rates, and not the least, the lengths of the instruments clearly suggested that the PBCL was better suited for screening for emotional and behavioural problems in the school reception classes than the CBQ. However, it is important to acknowledge some of the limitations of the measure derived from the PBCL in this study.

The first was that when corrected for chance, the agreements of the PBCL with the TRF (kappa=0.61) and with the teachers' independent views (kappa= 0.52), were only moderate in identifying children as problem or non-problem cases. This is a source for concern, considering that all the measures were obtained from the same source at an interval of about 2-4 weeks. But because agreements on test-retest, even on the same instrument, are never perfect, the weakness is not specific to the PBCL. In fact the correlation between the PBCL and TRF measures (0.83) obtained two weeks apart was comparable to the re-test figures of both TRF and the PBCL given by their authors (0.89 and 0.88 respectively).

The second concern was that two of the PBCL's items- wets/soils- did not show a high correlation with its main frame and appeared on two separate factors. However, these findings were similar to those reported by the authors and arguably make a case for deletion of these items in a future revision of the scale.

The third and major concern was the lack of an external source of validation for the data obtained in this study. The validity of the PBCL was largely measured in relation to the TRF as a standard reference point. As with any other measure for identifying emotional and behavioural problems, the TRF has its own limitations. In particular, 24 of its items had to be dropped from the principal components analysis in the present study and only 51% of the variance was accounted for by the eight requested factors. Because of this, there is some potential for circular reasoning that the comparison of the PBCL relied on another imperfect instrument. However, as discussed earlier in Chapter One, currently there is no infallible criterion for identifying emotional and behavioural problems against which the construct or criterion validity of an instrument may be tested. The most frequently used criterion- *referral for mental health services,*

is not necessarily better. It is dependent to a large extent on the particular way the services are organised and delivered in a given area or country. Similar remarks apply to *psychiatric diagnosis*- another common criterion used to assess the validity of instruments (for example, Rutter et al., 1970). Moderate agreements among clinicians in diagnosing children's behavioural problems (Cantwell, 1988; Boyles & Jones, 1985) limit the possibility of using 'psychiatric diagnoses' as a gold standard. Therefore, the agreement of the PBCL with the TRF, which is used internationally in research on emotional and behavioural problems and in the clinical settings is interpreted as an evidence for its convergent validity.

A related concern is whether the children selected by the PBCL would also be identified by independent trained observers as showing emotional and behavioural problems. In the nursery context, McGuire and Richman (1986) found that two-thirds of the children identified by the PBCL were also selected by independent observers as showing emotional and behavioural problems. More recently, Luk et al. (1991) in Hong Kong preschools found 79% of children selected by the PBCL as having problems to receive a similar rating by trained observers. Children rated as showing severe problems in their study differed significantly in their behaviour when observed during language and cognitive ability task- taking situations. Within the available resources, similar findings could not be established in the present, reception class context, but it seems likely that comparable findings would result if similar measures were obtained.

The final concern relates to the PBCL factors. Although the PBCL factors seemed more robust than the CBQ factors, the similarity between the original factors (McGuire and Richman (1986) and the factors identified in this study was broad. This suggests

some limitations to the reliability of the PBCL's factorial structure. This issue will be viewed in Chapter Three where the PBCL data in India can be taken into account. All these concerns bear upon the issue of the purposes for which the PBCL may be used. This question is also addressed in Chapter Three.

2.7 Implications of the findings

The findings from the comparison of the PBCL and CBQ indicated that the PBCL was better suited for screening for emotional and behavioural problems in children in the reception class context at least in and around London. It was therefore decided to select the PBCL for further evaluation in India.

The next chapter presents the study carried out to evaluate the PBCL in the first year of primary schools in India.

CHAPTER THREE

STUDY TWO

Evaluation Of The Preschool Behaviour Checklist For Use In The First Year Of Primary Schools In Ludhiana, India

3.1 Introduction

In Study One, the Preschool Behaviour Checklist (PBCL) (McGuire and Richman, 1988) was found well suited for screening children for emotional and behavioural problems in the reception class primary school context in London (Britain). This study was designed to evaluate the suitability of the PBCL for screening for emotional and behavioural problems in children in a parallel context in Ludhiana, India.

3.2 Criteria for evaluation

Several criteria were used to enable the evaluation. The first was to assess the similarity of the factorial structure of the PBCL resulting from its use in India[1] with that found in the London study (Study One). The second was to examine the internal consistency of the PBCL resulting from its use in India in comparison with the same in Study One. The third was to investigate the agreement between the Indian teachers' independent views regarding which children present emotional and behavioural problems in the classroom and the measures obtained from the use of the PBCL. The fourth was to examine the prevalence rates of emotional and behavioural problems in children resulting from the use of the PBCL. The fifth was to evaluate the

[1] 'India'/'Indian schools' is used to refer to the schools of Ludhiana city which participated in this study.

performance of the PBCL at alternative cut-off points in relation to the teachers' independent judgements. The findings regarding the teachers' agreements with the PBCL measures, the prevalence rates of the problems and the performance of the PBCL at alternative cut-off points were also examined in comparison to the similar findings from Study One.

Similarity in the findings obtained from the use of the PBCL in India with the findings of Study One, would provide evidence for the suitability of the PBCL for screening for emotional and behavioural problems in children, in the first year of primary schools in Ludhiana, India.

In addition, the similarity in the factor structure of the PBCL obtained in this study with that reported by McGuire and Richman (1986) from their original study was examined. Jackson (1989) used the PBCL on reception class school children in London. The similarity of the factors reported by her with those found in the Indian study was also explored. Similarities in the PBCL factors from the Indian study with those identified by McGuire and Richman (1986) and Jackson (1989) would provide further evidence for the construct validity of the PBCL.

3.3 Location and time

The study was conducted in the winter term of 1990 in ordinary schools of Ludhiana City, Panjab (India). Figure 3 shows the location of Ludhiana City in India.

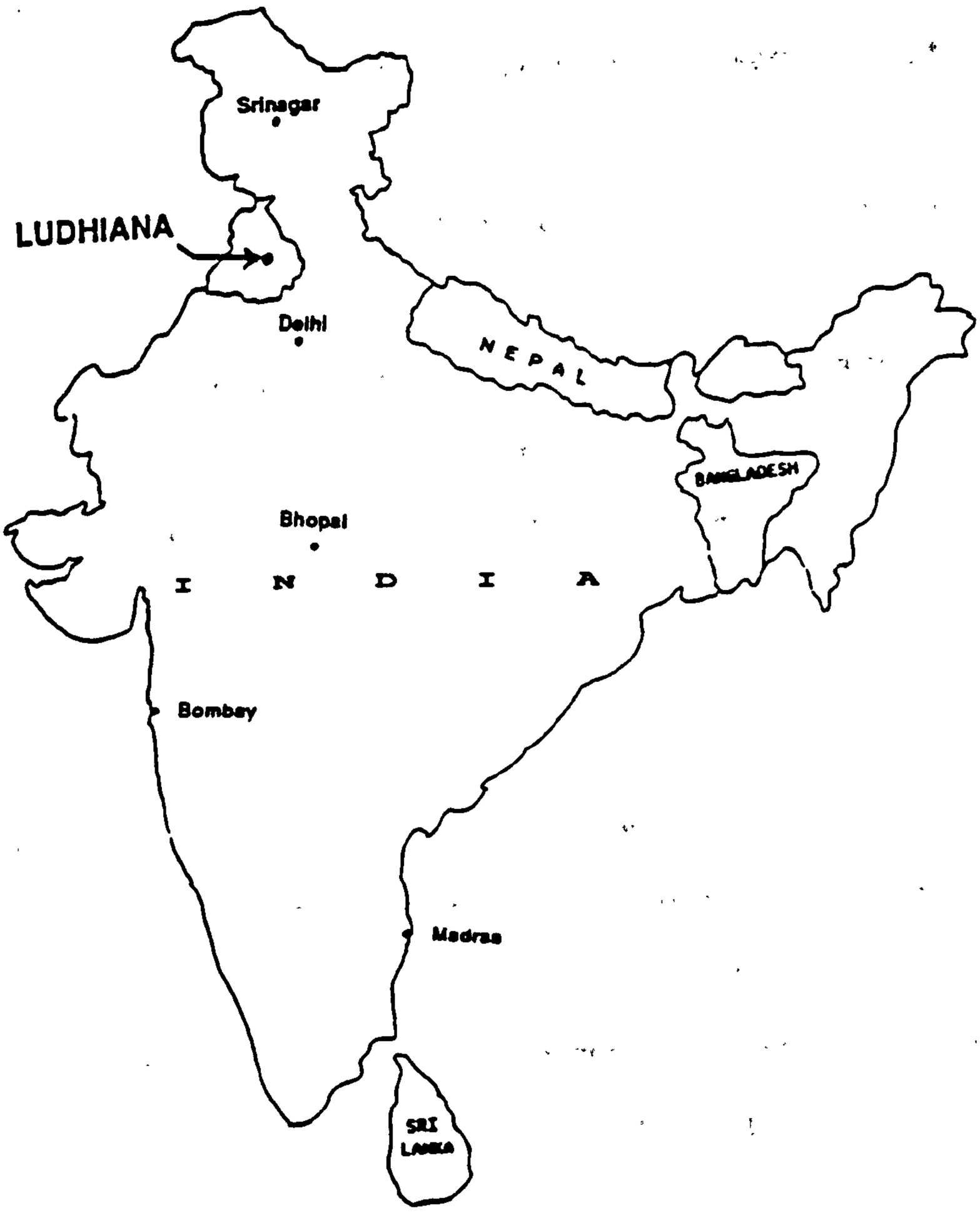


Figure 3: Location Of Ludhiana In India

3.4 The first year of school in Ludhiana

There are usually 30-40 children and two or more classes per age group in an ordinary classroom in most schools in Ludhiana City. The curriculum is geared mainly towards teaching the 3Rs. The children usually sit in rows in the classroom and the arrangements are more formal than in contemporary English schools. In most cases one teacher is in charge for one class and the children are likely to spend most of their day with her. The children get regular homework which is evaluated on a daily basis. Most schools have an examination system and the children take quarterly and annual, oral and written tests. The atmosphere is that of respect and submission to the teacher in the classroom and the teacher is likely to expect 'fingers on lips' quite frequently from the children.

There are neither any special services for children with emotional and behavioural problems within the school system, nor are there any special schools in the city. In general, there are currently no services for children with emotional and behavioural problems in the city except for the psychiatric departments of two teaching hospitals, where children may be seen in the case of extremely severe problems.

3.5 METHOD

3.5.1 Translation and modification of the Preschool Behaviour Checklist

The first step in this study was to translate the Preschool Behaviour Checklist into Panjabi, the first language of people in Ludhiana, Panjab (India). This was done by a professional translator. It was then translated back to English by two graduate students

who had not seen the original English version of the PBCL. The retranslated English version and the original PBCL were compared by the researcher herself and were found well matched (The retranslated English version is enclosed in Appendix 4). A draft of the Panjabi version was then checked by two teachers who agreed to the clarity of the terms. Based on their suggestions two items were slightly modified to make them more appropriate to classroom settings in India. These were items 5 and 16. In item 5 'hardly ever concentrates on any table play' was changed to 'hardly ever concentrates on any activity' and item 16 'interferes with work or play of other children' was retained as 'interferes with work of other children'. Since all school teachers in India can read and write English (but some find it difficult to operate only in English, especially where the terminology is technical), the Panjabi version of items was assembled parallel to an original English version. The PBCL was then reprinted[2] in India with permission from its publishers in Britain. A copy of the revised PBCL is given in Appendix 5.

3.5.2 Procedure for contacting teachers and getting the PBCLs completed

The requirement of the study was that teachers of the first year of Primary School should complete one PBCL for each child in their class. The local education authorities were contacted personally for permission to contact schools who very willingly consented to the proposal. The headteachers of schools accessible to the researcher were personally approached along with a letter which described the objectives of the study. The study was briefly introduced and consent was sought to see the teachers of the first year of primary school. Of the 12 headteachers approached, 10 gave

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[2] A new name- Child Behaviour Checklist was given on the reprinted version. This was done only to avoid confusion in the minds of teachers resulting from the term 'Preschool' when the scale was being used in schools. However, because of the conditions of publishers copyright, the name PBCL will be used here.

permission to contact their teachers, though they varied in their procedures about how they allowed this contact to take place. While most of them on a friendly note allowed the researcher to go to the classrooms with a messenger (either a child from an older class or one of the employees or the headteacher herself) and speak to the teachers, others called them into the staff room and the researcher waited for a convenient time to see them. An exception to all this was a school where first an appointment had to be sought to speak to the headteacher and the researcher then had to return another day to speak to the classteachers. In all, 20 teachers in these schools were contacted and each was given a letter giving the objectives of the study and describing what they would have to do if they chose to participate. Nineteen of these teachers agreed to participate, the one who refused was about to take maternity leave.

In this initial meeting, the teachers were given a brief introduction individually to the study and their role in it. The letter and a consent form were left with them, so they could read the details at their convenience and a time was made to get back and collect their final agreement to complete the PBCLs. Within this form was a column to seek teachers' independent judgements about emotional and behavioural problems shown by the children in their classes. They were asked to give these judgements for all children in their classes on a three point global rating of 0, 1 and 2 indicating none, possible and definite problems shown by each child. Most teachers agreed to complete the forms in a week's time. The researcher returned on the set dates and this time approached the teachers directly in the classrooms, collected the forms after checking if they had been filled in correctly and gave packets of the PBCLs (one for each of their pupils) to teachers along with letters describing the procedure for completing them. Although the letters were self explanatory, all the teachers were briefed on the procedure for completing the PBCLs. Just as in London, the teachers were asked to

familiarise themselves with the contents of the PBCL, to observe the children for a week with those behaviours in mind and then to complete the PBCL's. (The letters given to classteachers, headteachers and the reply form are given in Appendix 6).

Most teachers agreed to complete the PBCLs in 3-4 weeks time. They were collected personally on the dates given by the teachers after a quick check that no items were unmarked. About two-thirds of the teachers returned the completed assessments very punctually, others took longer for reasons such as unexpected extra work at school, medical or personal problems and three could not complete them.

3.5.3 Sample

The sample consisted of 496 children for whom PBCLs were completed by 16 teachers for all members of their classes. Of these, 8 PBCLs were discarded because they were incomplete and the remaining 488 were analysed. 261 (53.5%) of them were for boys and 227 (46.5%) for girls. The mean age of the children was six years and six months (SD = 5.85 months). The teachers had known the children for a period of eight months on average when they completed the PBCLs. In order to make the sample comparable with Study One's sample, the children were selected from independent as well as state schools.

3.5.4 Scoring and analyses

As with the London sample, the items of the PBCL were scored according to the procedure given by McGuire and Richman (1986). The data were analysed using the same methods as with the London data. The results are presented in the following section.

3.6 RESULTS

3.6.1 Distribution of scores

First, the distribution of scores was examined. With a maximum possible score of 44 on the PBCL, the highest obtained in this study was 27. Table 26 shows that 44% of the children scored between zero and five and another 33% were between 6 to 11 on the PBCL. The mean score of the children was 7.56 (SD=5.82). The boys had significantly higher mean score than the girls ($F=16.05$, $df= 1,486$, $p <.001$). Table 26 also shows that the mean score was considerably higher than the means found in Study One but the pattern of difference between scores of boys and girls was similar in the two studies.

3.6.2 Factor structure

Principal components analysis with varimax rotations were performed on the data obtained from the use of the PBCL in India. Five factors with eigen values greater than 1.00 emerged and accounted for 55% of the variance. The factor names, their eigen values, the internal consistency and the variance accounted for by each factor are given in Table 27. Table 28 shows the items loading at or above 0.30 on each factor. Table 29 compares the factorial content of the factors identified in this study and Study One.

Consistent with Study One, the first, largest factor was 'conduct/aggressive' (eigen value= 5.13). It accounted for 23.3% of the overall variance. Ten items- activity, interferes, wanders aimlessly in the classroom, is difficult to manage, has poor

Table 26

Distribution Of Scores Of Indian And London[1] Children On PBCL.

Scores	Total (N=488)	Boys (N=261)	Girls (N=227)	F-Value[2]
Indian				
N	488	261	227	
0 - 5	43.64%	37.54%	50.66%	
6 - 11	32.99%	34.10%	31.72%	
12 - 17	17.42%	20.69%	13.66%	
18 - 23	4.92%	6.13%	3.52%	
24 - 27	1.02%	1.53%	0.44%	
Mean	7.56	8.53	6.45	16.05***
S.D.	5.82	5.93	5.50	(df=1,486)
Skew	0.76	0.63	0.94	
Kurtosis	0.13	0.00	0.47	
London				
N	350	174	176	
0 - 5	61.70%	54.60%	68.75%	
6 - 11	24.00%	27.86%	20.45%	
12 - 17	12.30%	14.36%	10.22%	
18 - 28	02.00%	02.89%	00.57%	
Mean	5.21	5.96	4.46	7.87**
S.D.	5.03	5.46	4.45	(df=1,348)
SE	0.27	0.41	0.34	
Skew	1.21	1.18	1.11	

[1]London data are from Study One

[2]Gender differences in PBCL mean scores

** $p < .01$ *** $p < .001$

Table 27

PBCL Factors- Names, Internal Consistency, Eigenvalues And Percent Of Variance In Indian And London Data.

Factor	Alpha	Eigen Value	Percent of Variance
Indian			
1. Conduct/Aggressive	0.85	5.14	23.30
2. Social Withdrawal	0.74	2.97	13.60
3. Emotional/Sensitive	0.52	1.50	6.80
4. Antisocial	0.56	1.38	6.30
5. Wets/Soils	0.66	1.14	5.20
London			
1. Conduct/Aggressive	0.89	5.24	24.0
2. Emotional/Sensitive	0.70	2.86	13.0
3. Social Withdrawal	0.70	1.51	6.9
4. Aimless/Wanders	0.62	1.36	6.2
5. Wets/Soils	0.15	1.14	5.2
6. Habits	0.15	1.01	4.6

Table 28

Factor Loadings[1] Of PBCL Used On Indian Children.

Items[2]	1	2	3	4	5
1. Activity level	.46				
2. Not liked by Peers	.35	.34		.44	
3. Wets					.86
4. Soils					.83
5. Poor Concentration	.72				
6. Difficult to manage	.73				
7 .Demands Attention	.60				
8. Unclear Speech		.54			
9. Reluctant to speak		.80			
10. Tantrums	.49			.47	
11. Withdrawn from peers		.71			
12. Whines/ Complains			.50		
13. Sensitive, Easily upset			.74		
14. Bites, Kicks, Fights	.69				
15. Wanders aimlessly	.70				
16. Interferes	.75				
17. Miserable			.59		
18. Taunts, Teases	.70				
19. Withdrawn from staff		.79			
20. Destroys				.71	
21. Fearful	.49		.56		
22. Habits				.59	

[1] Loadings less than 0.30 not included in the table.

[2] Item contents are abridged

concentration, teases, fights, demands attention, is not liked by peers and has tantrums, loaded on this factor (see Table 28). Nine of the 10 items onto this factor were the same as in Study One (see Table 29). Wanders aimlessly did not load on the 'conduct/aggressive' factor in Study One. Instead, there, this factor included two other items, destroys and whines. Destroys in this Indian study loaded on the fourth factor which was also externalising in nature, but whines loaded on the third factor which was mainly internalising in nature.

The second factor, 'social withdrawal' accounted for 13.6% of the overall variance and included reluctance to speak, withdrawn from the peers, withdrawn from the staff and unclear speech. Except unclear speech, the other items were present on the 'social withdrawal' factor of Study One. This factor also included two other items - fearful and not liked by others in this Indian study but they loaded more strongly on other factors. Fearful had a higher loading on the third 'emotional/sensitive' factor and not liked had a higher loading on the fourth 'aggressive' factor. Fearful loaded on the 'social withdrawal' factor in the Study One as well, making five of the six items, as the same in the two studies.

The third factor was small, 'emotional/sensitive' with only four items- sensitive, miserable, fearful and whines/complains. All four items were the same as in the Study One, However, another item, demands attention was present on the 'emotional/sensitive' factor in the Study One. Demands attention in this Indian study grouped with the items on the first 'conduct/aggressive' factor.

Table 29

Comparison Of PBCL Factors Found In India And In London- Study One.

Factor Name	r[1] between two studies	Items in both studies	Items only in one study
1. Conduct/ Aggressive	0.93	Activity Not liked by peers Difficult to manage Demands attention Tantrums Fights Interferes Teases Poor concentration	<u>Only In India</u> Wanders aimless <u>Only In London</u> Whines/ Complains Destroys
2. Social Withdrawal	0.93	Reluctant to speak Withdrawn from peers Withdrawn from staff Fearful	<u>Only In India</u> Not liked by peers Unclear speech <u>Only In London</u> None
3. Emotional/ Sensitive	0.84	Whines/ Complains Sensitive Miserable Fearful	<u>Only In India</u> None <u>Only in London</u> Demands attention Tantrums Not liked by peers Withdrawn/Peers
4. Antisocial	0.72[2]	-	<u>Only in India</u> Destroys
		-	Habits
		-	Tantrums
		-	Not liked by peers
5. Sphincter problems	1.00	Wets Soils	- -

[1] r is Pearson's product-moment correlation coefficient

[2] is correlation of factor four -Indian with factor one-London.

The fourth factor was similar to the first one and could be described as 'antisocial' and included items such as, destroys, not liked by most children, tantrums and habits. This factor did not resemble any of the Study One factors.

As in Study One, sphincter problems- wets and soils emerged as separate from the main body of the PBCL in the fifth factor.

To assess the similarities of the factors obtained in the Indian study with those from the Study One, more systematically, the procedures adapted by Achenbach, Verhulst, Baron, Althaus (1987) were followed. All Indian children were first scored on the factors (subscales) derived from the analyses of the PBCL in Study One. Specifically, the raw scores of 0, 1 and 2 on each PBCL item loading on each of the factors in Study One were summed to obtain subscale scores for each Indian child. Each Indian child was then scored on the factor subscales derived from the factor analyses of the Indian data. Pearson's correlation between the two sets of scores were examined. Table 30 shows the correlations between the subscale scores obtained when the Indian children were scored on Study One factor subscales and when they were scored on the Indian factor subscales. The first three factors- 'conduct/aggressive', 'social withdrawal' and 'emotional/sensitive' obtained in the Indian study were found to be strong counterparts of the three similar factors found in Study One. With N= 488, the r values between 0.84 to 0.93 for these three factors were highly significant (p <.001). The fourth factor 'antisocial' in the Indian study which did not find a counterpart in the London study was significantly correlated (0.73) with the first, 'conduct/aggressive' factor of Study One. The fifth factor 'sphincter problems' was identical in the two studies.

Further, the factors from this Indian study were compared with those found by McGuire and Richman (1986) and Jackson (1989). McGuire and Richman (1986) found that six factors emerged from the principal components analyses of the data obtained from the use of the PBCL in the preschool settings in London. Jackson (1989) in her study of reception class children from schools in the outer London boroughs also identified six factors. The complete composition and order in which the factors emerged in their studies are given in Appendix 1). The comparison of factors identified in this Indian study with the McGuire and Richman study, and with the Jackson study are given in Table 30 and 31.

Eight of the ten items in the first 'conduct/aggressive' factor and all items in the 'social withdrawal' and 'emotional/sensitive' factors in this Indian study were the same as in Jackson's three corresponding factors. The fourth factor, 'antisocial', in the Indian study did not correspond with any of the factors in Jackson's study. All items on this factor loaded on the first, 'conduct', factor in her study. The fifth 'sphincter problems' factor in the Indian study was split into two factors in the Jackson study but included the same items- wets, soils. Jackson, however, identified a 'restless' factor which did not emerge in this Indian study.

The 'conduct/aggressive', 'social withdrawal' and 'emotional/sensitive' factors in the Indian study were also clear replications of the corresponding factors in McGuire and Richman's findings. In the 'conduct' factor seven items were the same in the two studies. Their 'social withdrawal' factor comprised only two items- reluctant to speak and withdrawn from staff- which were present in the Indian study, where this factor took over another four items- withdrawn from peers, not liked by peers, unclear speech and fearfulness. The fourth, 'antisocial' factor in the Indian study did not resemble any

Table 30

Comparison Of PBCL Factors Found In India And In McGuire & Richman's Original Study

Factor Name	r[1] between two studies	Items in both studies	Items only in one study
1. Conduct/ Aggressive	0.95	Activity Not liked by peers Poor concentration Difficult to manage Fights Interferes Tantrums	<u>Only in India</u> Wanders Demand attention teases <u>McGuire & Richman</u> Unclear speech Destroys
2. Social Withdrawal	0.86	Reluctant to speak Withdrawn from peers	<u>Only in India</u> Withdrawn from staff Unclear speech Fearful <u>McGuire & Richman</u> None
3. Emotional/ Sensitive	0.88	Sensitive Miserable Fearful Whines/ Complains	<u>Only in India</u> None <u>McGuire & Richman</u> Demand Attention Tantrums
4. Antisocial	0.77[2]	-	<u>Only in India</u> Destroys Habits Tantrums Not liked by peers
5. Sphincter Problems	1.00	Wets Soils	- -

[1] r is Pearson's product-moment correlation coefficient

[2] is correlation of factor four- Indian study with factor one- McGuire & Richman's original study.

Table 31

Comparison Of PBCL Factors Found In India And In Jackson Study.

Factor Name	r[1] between two studies	Items in both studies	Items only in one study
1. Conduct/ Aggressive	0.94	Not liked by peers. Poor concentration. Difficult to Manage. Demand attention. Tantrums. Interferes. Fights. Teases.	Only in India Wanders, aimless. Activity. Only Jackson Whine/Complains. Destroys.
2. Social Withdrawal	0.96	Not liked by peers. Unclear speech. Reluctant to speak. Withdrawn from peers. Withdrawn from staff. Fearful	Only in India None Only Jackson Wanders aimless.
3. Emotional/ Sensitive	0.88	Whines / Complains. Sensitive. Miserable. Fearful.	Only in India None Only Jackson Demands Attention Tantrums. Habits.
4. Antisocial	0.76[2]	-	Only in India Destroys Habits Tantrums Not liked by peers
5. Sphincter problems	0.33	Wets	Only in India Soils Only Jackson unclear speech

[1] r is Pearson's product-moment correlation coefficient

[2] Is correlation of factor four-Indian study with factor one- Jackson study

of the factors in McGuire and Richman's findings but was combined largely with their 'conduct' factor. They also identified an 'aggressive' factor which was merged into the first 'conduct/aggressive' factor in the Indian study. Another factor termed as 'immature/isolated in their study did not emerge in the Indian study.

Using the same procedures as in assessing the similarities between the Indian and Study One factors, the correlations between the factors obtained in the Indian study and by Jackson (1989) and McGuire and Richman (1986) were examined. The results are given in Tables 30 and 31. The 'conduct/aggressive', 'social withdrawal' and 'emotional/sensitive' factors again proved to be strong counterparts of similar factors from the Jackson and McGuire and Richman studies (correlations ranging between 0.86 to 0.96). The fourth, 'antisocial' factor in the Indian study, was again correlated with the first factor in both cases. The fifth factor, sphincter problems had perfect correlations with the similar factor in the McGuire and Richman study, but was split into two factors in the Jackson study and therefore showed a lower correlation.

To summarise, together with some differences, the three PBCL factors- 'conduct/aggressive', 'social withdrawal' and 'emotional/sensitive', found in the Indian study had strong similarities with the corresponding factors in the three London studies- Study One, the Jackson study and McGuire and Richman study. The fourth 'antisocial' factor in the Indian study was combined with the first, 'conduct', factor in the London studies. The fifth, 'sphincter problems', factor, as in the London studies emerged as separate from the main body of the PBCL in the Indian study.

3.6.3 PBCL factors' Internal consistency and gender differences in mean scores

The internal consistencies of the PBCL factors found in this Indian study were examined using Cronbach's alpha. As in Study One, the first four factors were found to have moderate to high internal consistency (0.52 to 0.85). The mean scores of children for each factor based subscale were computed. Table 32 shows that using one way analysis of variance the boys had significantly higher mean scores than girls on factors consisting of externalising behaviours (F=20.12, df 1, 486 for factor 1 and F= 14.65, df=1, 486 for factor 4). The differences were similar in direction for the 'emotional/sensitive' and 'social withdrawal' factors but did not reach significance. These findings too were similar to those found in Study One, where boys scored significantly higher only on behaviours which were externalising in nature but not on emotional and withdrawn behaviour.

3.6.4 Internal consistency of the PBCL

Using Cronbach's alpha, the internal consistency of the PBCL as a complete scale was found to be 0.84, a value similar to that found in Study One. Further, the correlation of each item with the total scores was assessed and the results are given in Table 33. All items showed significant correlations but the values were low for three items- wets, soils and habits. The correlations between the PBCL total score and two of these three items- wets, soils, were found to be non-significant in Study One. Using the t-test, all items but wets, soils and habits differentiated between children who were above and below the cut-off point (see Table 33). In Study One, however, all items differentiated between the children who were below and above the cut-off point.

Table 32

Gender Differences In Factor Means Of PBCL In Indian And London Data.

Factor	Total Mean (SD)	Boys Mean (SD)	Girls Mean (SD)	F Value (df)
Indian (N)	488	261	227	
1. Conduct/ Aggressive	3.34 (3.33)	3.95 (3.63)	2.62 (2.77)	20.12*** (df 1,486)
2. Social Withdrawal	1.33 (1.73)	1.44 (1.77)	1.21 (1.68)	ns
3. Emotional/ Sensitive	1.21 (1.41)	1.25 (1.35)	1.18 (1.48)	ns
4. Antisocial	0.89 (1.20)	1.08 (1.30)	0.67 (1.01)	14.65*** (df=1,486)
5. Wets/ Soils	0.01 (0.15)	0.01 (0.10)	0.02 (0.20)	-
London (N)	350	174	176	1,348
1. Conduct/ Aggressive	3.25 (3.82)	4.03 (4.17)	2.48 (3.26)	15.02***
2. Emotional/ Sensitive	1.75 (2.05)	1.75 (1.98)	1.75 (2.12)	ns
3. Social Withdrawal	0.70 (1.23)	0.66 (1.27)	0.74 (1.22)	ns
4. Aimless/ Wanders	1.66 (1.90)	1.96 (2.12)	1.36 (1.61)	8.60**
5. Wets/ Soils	0.37 (0.27)	0.02 (0.13)	0.06 (0.27)	ns

** p <.01. *** p < .001.

Table 33

PBCL Items -Their Correlation With Total Scores And Ability To Distinguish Between Problem And Non-problem Groups Based On Cut-off Of 12 In India

Item	r^1	t^2-value
1. Activity level	.49***	8.65***
2. Not liked by Peers	.59***	10.22***
3. Wets	.21***	1.85
4. Soils	.14**	1.18
5. Poor concentration	.70***	15.80***
6. Difficult to manage	.62***	9.86***
7. Demands Attention	.65***	13.00***
8. Unclear Speech	.38***	5.23***
9. Reluctant to speak	.37***	4.90***
10. Tantrums	.53***	7.51***
11. Withdrawn from peers	.39***	4.71***
12. Whines/ Complains	.43***	8.58***
13. Sensitive, easily upset	.23***	3.95***
14. Bites, Kicks, Fights	.60***	10.12***
15. Wanders aimlessly	.68***	11.48***
16. Interferes	.52***	8.24***
17. Miserable	.38***	5.40***
18. Taunts, Teases	.55***	8.15***
19. Withdrawn from staff	.49***	6.59***
20. Destroys	.38***	5.15***
21. Fearful	.38***	5.78***
22. Habits	.19***	1.51

[1]N = 488, [2]N for problem group = 114, N for non-problem group= 374

** $p < .01$ *** $p < .001$.

3.6.5 Prevalence rates for emotional and behavioural problems.

Table 34 shows that, using the recommended cut-off score of 12, 23.4% children were identified as having emotional and behavioural problems. The percentages of children identified as having emotional and behavioural problems in this study were higher than those found in Study One in London (15%) using this criterion. However, as in Study One more boys were found to show emotional and behavioural problems than girls. Twenty eight percent boys and 15% girls in this Indian study, as compared with 17% boys and 11% girls in Study One, were found to show emotional and behavioural problems.

3.6.6 Agreement between independent judgements made by Indian teachers and the measures obtained from the use of the PBCL

All teachers gave an independent judgement of the perceived problems of individual children, using a three point global rating of definite, possible, or no problems. Agreements between teachers and the PBCL assessments were seen by dividing the children into three groups on the basis of these ratings just as was done in Study One. The results of the oneway analysis of variance indicated significant differences in the mean PBCL scores of children in the three groups, with the definite problem group identified by teachers scoring the highest and the non problem group the lowest ($F=119.09$, $df= 2, 486$ $p. < .001$), again a clear replication of the findings from study One (see Table 35). When scores of children were compared on each item, all items but five differentiated between children in the problem and non-problem groups (see Table 36). These items were: wets, soils, sensitive, fearful and habits. Three of these items- wets, soils and sensitive did not differentiate between the problem and non-problem groups formed on the basis of the teachers' judgements in the British

Table 34

Prevalence Rate Of Emotional And Behavioural Problems In Indian & London Children At PBCL Cut-off Score Of 12

Criteria	Total	Boys	Girls
N	488	261	227
Indian	23.36%	28.35%	17.62%
N	350	174	176
London	14.30%	17.20%	10.79%

Table 35

PBCL Means - Differences In Groups Designated By Indian & London Teachers As Definite, Possible Or Non-problem

Category	N	N Above cut-off	Mean (SD)	F Value
Indian				
No Problem	399	53 (13.28%)	6.06 (4.75)	
Possible Problem	21	6 (28.57%)	9.95 (3.99)	119.09*** (df 2,486)
Definite Problem	68	55 (80.88%)	15.62 (5.13)	
London				
No Problem	256	11 (4.3%)	3.30 (3.40)	
Possible Problem	79	29 (36.7%)	9.60 (4.10)	138.00*** (df=2,347)
Definite Problem	15	10 (66.7%)	14.90 (6.40)	

*** $p < .001$

Table 36

PBCL Items Distinguish Between Problem And Non-problem Groups Based On Indian Teachers' Judgements

Item[1]	t^2-value
1. Activity level	7.21***
2. Not liked by Peers	6.43***
3. Wets	1.95
4. Soils	0.64
5. Poor concentration	11.18***
6. Difficult to manage	7.28***
7. Demands attention	6.94***
8. Unclear speech	2.65**
9. Reluctant to speak	2.95**
10. Tantrums	4.75***
11. Withdrawn from peers	3.11**
12. Whines/ Complains	5.44***
13. Sensitive, easily upset	1.75
14. Bites, Kicks, Fights	7.79***
15. Wanders aimlessly	8.44***
16. Interferes	6.96***
17. Miserable	3.62**
18. Taunts, Teases	5.99***
19. Withdrawn from staff	3.41**
20. Destroys	3.47**
21. Fearful	1.69
22. Habits	1.27

[1] Item Contents are abridged.

[2] N for problem group = 68, N for non-problem group = 399

** p <.01, *** p <.001

samples. While wets and soils were not considered important components of the constellation of emotional and behavioural problems in both the countries, it is not clear why 'sensitive' in both countries and 'fearful' in India did not distinguish between the two groups. Since these items differentiated between the problem and non-problem groups formed on the basis of the recommended, clinically derived, cut-offs, one possibility could be that these behaviours have more of a clinical relevance and not so much of an educational importance. It may be that teachers consider these behaviours as linked to development and believe that they will pass with time.

Of the 89 children designated by teachers as having a definite or possible problem, 61 (68.5%) were above the recommended cut-off point of 12 on the PBCL. Considering only those who presented definite problems in the teachers' view, 81% were above the cut-off point of 12, a rate of agreement much higher than that obtained from the London samples in Study One (see Table 35). However, the rate of agreement about children considered not to present problems was lower than that found in Study One. Whereas in this study only 87% were correctly identified as 'not showing problems', in Study One the agreement was 95.7 percent.

3.6.7 Efficiency of the PBCL in India at alternative cut-off points

The teachers' independent judgements being the criterion measure, the performance of the PBCL in India at alternative cut-off points was examined using Receiver Operating Characteristic (ROC) analysis (Murphy et al., 1987; Hanley and McNeil, 1982) in the same way as in the London study. The data obtained from the use of the PBCL were plotted on a ROC curve and are shown in Figure 4. Figure 4 illustrates the changes produced in sensitivity (true positives) and specificity (true negatives) of the

1. PBCL

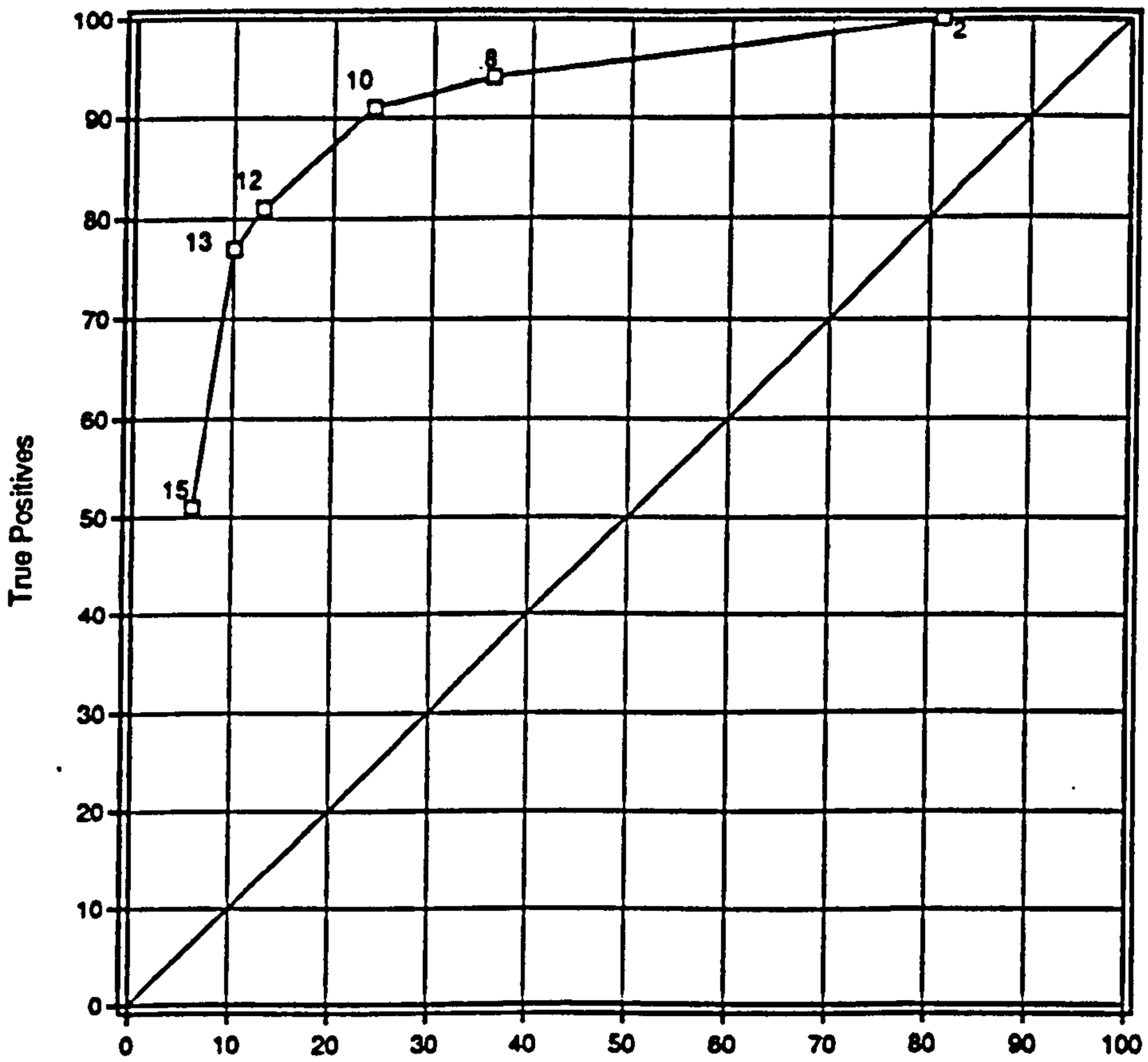

Figure 4: Receiver Operating Characteristic (ROC) Analysis Curve Drawn From The Indian PBCL Data

PBCL at different cut-off points. When the cut-off was lowered from 12 to 10 (as in Study One), the correctly identified problem cases (sensitivity) increased from 81% to 91% but specificity reduced from 87% to 76%. A similar trend was noted in Study One when the cut-off was changed from 12 to 10. There, the sensitivity increased from 67% to 87% and the specificity reduced from 96% to 94%. By raising the cut-off to 13 (one standard deviation above the mean score), the sensitivity in this study reduced to 76% but specificity increased to 90 percent. Since changing a cut-off point affects the rate of prevalence of problems, the numbers of children identified at various cut-off points were examined. Table 37 shows that in this study at a cut-off point of 12, the prevalence rate was 23.36% but with a cut-off point of 10, 35% of the children were identified as having emotional and behavioural problem. By increasing the cut-off point to 13 (one standard deviation above the mean score), the rate dropped down to 19.7%. This was very close to 18.23%, the number of children identified by teachers independently (possible and definite problem categories combined) as showing emotional and behavioural problems and to 18.2%, the prevalence at a cut-off point of 10 in Study One. Not many studies have been conducted in India to find the incidence of emotional and behavioural problems in school children and those carried out have not used any standardised instruments. However, Jiloha and Murthy (1981) from a two stage screening of primary school children- involving nominations by teachers and interviews- indicated that 20% of the children showed psychiatric problems, a rate very close to that obtained with 13 as the cut-off in the present study.

As discussed in Study One the choice of an optimum cut-off point on a scale may depend upon at least three considerations: a balance between sensitivity/ specificity; the expected prevalence rates; and the purpose to be served by the cut-off point (Fombonne, 1991). In this study changing the recommended cut-off point of 12 to 13

Table 37

Sensitivity And Specificity Of PBCL At Different Cut-off Points In India And London.

Cut-off Point	Sensitivity (False Negatives)	Specificity (False Positives)	Prevalence Rate
Indian			
N	68	399	488
10	91.00% (9.0%)	76.0% (24.0%)	35.0%
11	85.00% (15.0%)	81.0% (19.0%)	28.9%
12	81.00% (19.0%)	87.0% (13.0%)	23.4%
13	76.50% (23.5%)	90.0% (10.0%)	19.7%
London			
N	15	256	350
12	66.66% (33.3%)	95.7% (4.3%)	14.3%
10	86.60% (13.3%)	94.0% (6.0%)	18.2%

(one standard deviation above the mean score) did not affect the sensitivity and specificity ratio to a large extent. Averaged across sensitivity and specificity, the correct classification rate at 12 was 84% and that at 13, it was 83%, but it reduced the prevalence rate from 23.36% to 19.67 percent. This rate of prevalence of emotional and behavioural problems was close to that identified by teachers, by others and that found in Study One in London using 10, the optimum above the mean cut-off. On a balance, therefore, 13 seemed to be a more appropriate cut-off score than 12 for the Indian children.

3.7 DISCUSSION

Together with the study in London (Study One), this Indian one was designed to assess the suitability of the PBCL for screening children for emotional and behavioural problems in the first year of primary schools in India. The teachers in India were asked to give their own view of which children in their classes had emotional and behavioural problems and then to assess the behaviour of their pupils using the PBCL. The suitability of the PBCL was then examined on the basis of criteria designed to evaluate its measurement properties and agreement with teachers' views.

One criterion for assessing its suitability was to compare the factorial structure obtained from the use of the PBCL in India with that found in London; the similarity with the factors from McGuire and Richman's original study (1986) and the Jackson study (1989), were to provide additional evidence for the validity of the measures obtained from the use of the PBCL in India. Principal components analysis of the Indian PBCL data yielded five factors that were broadly similar to the factors identified from the use of the PBCL in London school reception classes in Study One. Four

factors showed a high correlation with the four validating factors from Study One, confirming that in the first year of primary schools in India, the PBCL measured emotional and behavioural problems as perceived by the teachers. The factors were also broadly consistent with the broad-band distinction between internalising and externalising problems found in Study One and documented in several other studies. The significant correlation of the factors derived from the use of the PBCL in India with those reported by McGuire and Richman (1986) from their original study, further verified that in the Indian context it measured the emotional and behavioural variables that it was designed to measure. The significant correlations of the PBCL factors found in this Indian study with those of Jackson (1989) provided additional evidence for the construct validity of the PBCL. The finding that certain items grouped together similarly in the normative samples in the two countries speaking different languages and varying vastly in cultural and socio-economic factors supported the conclusion that the PBCL is applicable in both countries (at least in the cities where it was evaluated) in the first year of primary schools. These findings also provided evidence that the empirical measures derived from the use of the PBCL have a cross-national reality to a significant extent.

In particular, the 'conduct/aggressive', 'social withdrawal' and 'emotional/sensitive' factors that emerged from the use of the PBCL in India resembled the empirical structure of the emotional and behavioural problems derived in many other studies (Achenbach and Edelbrock, 1978; 1986; Behar, 1974). The finding from the London studies that sphincter problems do not form a reliable or important component of emotional and behavioural problems as measured by the PBCL, was also born out in the use of the PBCL on Indian children. Like Study One and the literature more generally, the boys in India were found to have more problems, largely of an

externalising nature, than the girls (Bhatia et al., 1991; Richman et al., 1982; Crowther et al., 1981; Rutter, 1970).

A second criterion for assessing the PBCL's suitability for the Indian primary school context included examining its internal consistency as a complete scale. The findings in this regard indicated that when used in India the PBCL had a high internal consistency and that the Indian teachers used it with the same precision as teachers in London. Another criterion involved assessing the correspondence between the teachers' independent judgements about which children show emotional and behavioural problems and the measures derived from the PBCL. The findings from the Indian study like the London study, showed highly significant differences in the PBCL scores between groups formed on the basis of the teachers' view of definite, possible or non- problem cases. These findings provide support for the PBCL and indicate that it measures what in Indian teachers' opinion are emotional and behavioural problems in children. The findings also suggest that the teachers of the first year school children in the two countries share a view of what emotional and behavioural problems are and how they may be identified. Such findings may have implications for future exchange between the two countries regarding research on emotional and behavioural problems.

The findings from the categorical agreement between the scale and the teachers also demonstrated the utility of the PBCL in India. At the designated cut-off of 12, 81% of the children were found to be correctly identified from those who in the teachers' view were considered to demonstrate emotional and behavioural problems. Eighty seven percent were correctly identified from those who in the teachers' view did not show the problems. When the effect of varying the PBCL cut-off was examined on its accuracy in identifying the teacher defined problem and non- problem cases, a score of 13 was

found to be more effective in the first year of Indian primary schools. At the recommended cut-off point of 12, the misclassification rate of 16% was within the conventional boundaries for a screening instrument. However, this cut-off resulted in a prevalence rate of 23% which was high for a general population. The Indian PBCL data were plotted on a Receiver Operating Characteristic (ROC) curve to view the various ratios of sensitivity and specificity at alternative cut-off points. At a cut-off of 13, the sensitivity reduced to 76% but specificity increased to 90% (misclassification rate = 17%). With 13 as the cut-off the prevalence rate came down to 19.7%. Arguably, 12 could be an appropriate cut-off for some purposes as it gave a higher sensitivity than 13, but the prevalence rate was high at this cut-off. Therefore, as in Study One, following Fombonne's (1991) criteria, 13 was chosen as the optimum cut-off score. The number of children identified as having the problems at this point was close to the rate identified by the teachers (18.2%), the rate in Study One with its optimum cut-off of 10 (18.4%) and to the rates identified in other studies, for example, 20% by Jiloha and Murthy (1981) in India, and 15% by Jackson (1989) in London. The PBCL score of 13 in India also compared to Study One's score of 10 in being one standard deviation above the mean score of the Indian sample. It is intriguing to note that the designated cut-off, 12, in McGuire and Richman's sample was also one standard deviation above their mean score.

Although the findings from the Indian study indicated that the PBCL measured similar variables as it did in London and that it showed a great deal of convergence with the Indian teachers' view of emotional and behavioural problems, it is important to recognise the limitations resulting from its use in this study and more generally. As noted in the discussion of the findings of Study One, there were limitations to the factorial validity of the PBCL. Although a comparison of the three most robust factors

identified in this study showed significant correlations with the three corresponding factors in Study One, the original study by McGuire and Richman (1986) and the Jackson study (Jackson, 1989), it is important to note that the high correlations resulted only from some common items in each case (see Table 29 to 31). These correlations ignore variations in the size of the loadings of items and of the order in which factors emerge in different analyses and therefore do not suggest invariance or equality of factors across studies but only a statistically significant similarity.

Additionally, the picture of similarity in the factor structure deteriorates when the composition of the three main factors ('conduct/aggressive', 'social withdrawal' and 'emotional/sensitive') is compared across all four studies (one Indian and three in London- Study One, the Jackson study and the original study by McGuire and Richman). Table 38 shows a pool of the items loading on each of the three factors in the four studies. Of the 12 items that loaded on the first conduct/aggressive factor in at least one of the four studies, five items tended to vary in whether they loaded on a 'conduct/aggressive' or another factor. Similarly, of the seven items on the 'social withdrawal' factor, only two were present on the similar 'social withdrawal' factor across all four studies; and of the seven items on the 'emotional/sensitive' factor, only four were present across the four studies. Furthermore, when all factors yielded across the four studies were considered, Table 39 shows that one factor from each of the studies - the 'restless' factor in the Jackson study, the 'immature/isolated' factor from the McGuire and Richman study, the 'aimless/wanders' factor from Study One and the 'antisocial' from the Indian study - did not find counterparts in any of the other three studies.

Table 38

Comparison Of PBCL Factors Across 3 London Studies And An Indian Study

Item[1]	Indian	Study One	Jackson (1989)	McGuire Richman (1986)
Conduct/Aggressive				
Activity	Yes[2]	Yes	No	Yes
Not liked by peers[3]	Yes	Yes	Yes	Yes
Difficult to manage	Yes	Yes	Yes	Yes
Poor concentration	yes	yes	yes	yes
Interferes	Yes	Yes	Yes	Yes
Demands Attention	yes	yes	yes	No
Fights	yes	yes	yes	yes
Tantrums	yes	yes	yes	yes
Teases	yes	yes	yes	-
Wanders aimlessly	yes	No	No	No
Whines, Complains	No	Yes	Yes	No
Unclear speech	No	No	No	Yes
Social Withdrawal				
Reluctant to Speak	yes	yes	yes	yes
Withdrawn from staff	yes	yes	yes	yes
Withdrawn from peers	yes	yes	yes	No
Fearful	yes	yes	yes	No
Not liked by peers	yes	No	No	No
Unclear speech	yes	No	yes	No
Wanders aimlessly	No	No	No	yes
Emotional/Sensitive				
Sensitive	yes	yes	yes	yes
Miserable	yes	yes	yes	yes
Fearful	yes	yes	yes	yes
Whines/ Complains	Yes	yes	yes	yes
Demands attention	No	yes	yes	yes
Not liked by peers	No	yes	No	No
Habits	No	No	yes	No

[1] Pools of Items from all four studies on respective factors

[2] Yes/ No - show whether the items loaded on the factors or not

[3] Underlined items loaded on respective factors in all the studies.

Table 39

Replication Of PBCL Factors Across The Indian Study, Study One, McGuire & Richman's (1986) And Jackson's (1989) Studies.

Total Factors	McGuire Richman	Jackson study	Study One	Indian study
Conduct/ Aggressive	Yes	Yes	Yes	Yes
Social Withdrawal	Yes	Yes	Yes	Yes
Emotional/ Sensitive	Yes	Yes	Yes	Yes
Sphincter problems	Yes	Yes	Yes	Yes
Aggressive	Yes	No	No	No
Isolated-immature	Yes	No	No	No
Restless	No	Yes	No	No
Developmental	No	Yes	No	No
Aimless	No	No	Yes	No
Antisocial	No	No	No	Yes

This kind of partial replication of factors resulting from the use of the PBCL in different populations is a matter of concern but is not specific to the PBCL. Similar inconsistencies in the replication of factors are common in the literature. For example, Achenbach et al. (1987) found that only seven of the 12 factors in America found partial counterparts when the Child Behaviour Checklist (CBCL, Achenbach and Edelbrock, 1983*a*) was administered on Dutch children. Auerbach and Lerner (1991) also found that only seven of the ten CBCL factors in Israeli children were correlated with the American and Dutch CBCL factors. As was mentioned in Study One, Venables et al. (1983) identified two factors from the use of the Child Behaviour Questionnaire (Rutter, 1967), whereas McGee et al. (1985) reported six factors from the use of the same scale and eight factors from the same scale were identified in Study One in London. Several other examples of partial replication of factors are available in the literature (Luk et al., 1988; Kohn and Rosman, 1973 and Achenbach and Edelbrock, 1978 for review). While it may be possible to explain some of these differences by variables including designs of the studies, sample size and composition, these findings draw our attention to the inherent limitations of rating scales as measures of emotional and behavioural problems in children.

In particular, the comparison of the PBCL factors across four studies suggests that its individual factor subscales cannot be regarded without qualification as definitive measures of particular types of problems in children (that is, as diagnostic measures). However, when the items loading on the 'emotional/sensitive' and 'social withdrawal' factors in the Indian study are combined to derive a broad subscale of internalising problems and if the items on the 'conduct/aggressive' and the 'antisocial' factors are combined to derive a broad subscale of externalising problems, the replication across the four studies is better. Table 40 shows that of the eight items in the internalising subscale (reluctant to speak, withdrawn from peers, withdrawn from staff, whines/complains, unclear speech, sensitive, miserable and fearful), all are replicated

Table 40

Comparison Of Two Broad Subscales Found In The Indian Study Across Study One, McGuire & Richman's And Jackson's Studies

Subscales from Indian Study	Study One	Jackson Study	McGuire & Richman
Externalising			
Activity	Yes	Yes	Yes
Not Liked	Yes	Yes	Yes
Poor Concentration	Yes	Yes	Yes
Difficult To Manage	Yes	Yes	Yes
Demands Attention	Yes	Yes	Yes
Tantrums	Yes	Yes	Yes
Fights	Yes	Yes	Yes
Wanders Aimlessly	Yes	Yes	No
Interferes	Yes	Yes	Yes
Teases	Yes	Yes	--
Destroys	Yes	Yes	Yes
Habits	No	No	No
Internalising			
Reluctant To Speak	Yes	Yes	Yes
Withdrawn From Peers	Yes	Yes	Yes
Withdrawn Fom Staff	Yes	Yes	Yes
Whines/ Complains	Yes	Yes	Yes
Unclear Speech	No	Yes	Yes
Sensitive	Yes	Yes	Yes
Miserable	Yes	Yes	Yes
Fearful	Yes	Yes	Yes

in the McGuire and Richman (1986) and Jackson (1989) studies and all but one are replicated in Study One. Similarly, of the 12 items on the externalising subscale (Activity, Poor concentration, difficult to manage, demand attention, tantrums, fights, wanders aimlessly, interferes, teases, destroys, habits) 11 are replicated in Study One and the Jackson study and nine in the McGuire and Richman study. Thus, on the whole the replication across the four studies is better for two broad subscales than for the factor subscales derived from principal components analysis.

These findings have implications for the purposes for which the PBCL may be used. While, the PBCL may provide a satisfactory method for screening children for emotional and behavioural problems and making a broad distinction between externalising and internalising problems, its use beyond this level warrants caution. In particular, its factors may not be considered as definitive measures of specific problem syndromes such as social withdrawal or conduct problems. Where assessing specific characteristics, especially in individuals, is the aim, a second assessment stage, involving repeated measurement using several methods would be desirable. For the present study however, the aim was to identify a particular group of children who show emotional and behavioural problems in the classroom setting, with sufficient accuracy for research purposes. The results of the study are viewed as consistent with this aim.

3.7 Implication of the findings

Since the PBCL was found to be suitable for identifying children with emotional and behavioural problems in the first year of primary school context in Ludhiana, India, it was decided to use it for selecting the sample for Study Three in which the social cognitions of Indian school children with emotional and behavioural problems were explored.

CHAPTER FOUR

The Use Of The PBCL For Selecting Children With Emotional And Behavioural Problems

4.1 Introduction

The aim of this chapter is to describe how the PBCL was used for selecting children who participated in Study Three in which their social cognitions were examined. A second aim of the chapter is to describe how the PBCL was used for dividing the group of children selected for showing emotional and behavioural problems into subgroups of children showing different types of problems.

4.2 Selection of children

Two groups of children were selected. One included children who presented emotional and behavioural problems in the classrooms (the target group) and the other was a comparison group consisting of children who were free from reported problems. The criteria for their selection and the procedure followed in selecting them are given below.

4.2.1 Criteria for selecting children

On the basis of Study Two, two criteria were set up for selecting children. One was the children's scores on the PBCL and the other was their teachers' judgements about their behaviour. The children who both scored 13 or above on the PBCL and who in their teachers' judgements had emotional and behavioural problems, were selected to

be members of the target group. By including children who both scored above the PBCL cut-off and were judged to have definite problems by their teachers, it was intended to optimise the likelihood that children were correctly selected. The comparison group was formed by selecting children of the same gender next on the class register in the same classes as those selected in the target group. However, an exclusion criterion was also used in forming the comparison group. Children who otherwise met the requirements to be members of the comparison group but who scored 13 or above on the PBCL or who had the problems in their teachers' view were not included in the comparison group.

4.2.2 Procedure for selecting the children

Of the 488 children screened in Study Two, 45 children met the criteria to be members of the target group for Study Three. Since the number of children was small, more schools were contacted to recruit additional children. The procedure for contacting the schools and the teachers was the same as in Study Two and was carried out together with it. The procedure for getting the PBCLs completed from the teachers was also the same except that here, an abbreviated strategy was used. Whereas the teachers completed the PBCLs for all children in their classes in Study Two, here they completed the PBCLs only for (i) those children who showed problems in their view and (ii) the next child on the class register of the same gender who did not show problems in their view.

Twenty two schools (other than those in Study Two) were contacted for this study, of which 18 agreed to participate. There were 30 first year classes in these schools and 960 children in these classes. The teachers nominated 154 (16%) children as

definitely having emotional and behavioural problems. They completed the PBCLs for these children and for a comparison child for each nominated child, following the criteria stated above. Of the 154 children who had emotional and behavioural problems in the teachers' view, 125 (81.2 %) scored 13 or above on the PBCL. Of the 154 considered by the teachers as not having problems, 145 (94.2%) scored below 13. Table 41 shows that the teachers nominated a slightly higher number of children as presenting problems when additional children were being selected than in Study Two. The number of false negatives and false positives here, was lower than in Study Two. Of the 125 children who met the criteria to be members of the target group, only 121 found counterparts who met the criteria to be members of the comparison group.

Thus, 45 children from Study Two and 121 from this phase were selected to be members of the target group for Study Three. However, when Study Three was carried out, of the 166 children, only 115 were available for interviewing. The reasons why the remaining children were unavailable are given in Table 42. An equal number (115) of children were recruited in the comparison group. Of these, 95 children were available for being interviewed. Table 42 also includes the reasons for which the rest of the comparison group members were not available.

Of the 210 children who formed the sample for Study Three, 36 target and 30 comparison group children came from those who were screened in Study Two and the rest were recruited later. Table 43 shows the mean PBCL scores of the two groups of children: those who were selected in Study Two and those selected later. The differences between the mean PBCL scores of the two groups were examined using a two way analysis of variance testing for the effect of being a part of the target or

Table 41

False Positives And False Negatives In Study Two And Later Nominations

Category	Study Two	Later Nomination
Total (N)	488	960
Nominated as Definite Problem	68 (13.9%)	154 (16.0%)
N Above 12	52 (76.5%)	125 (81.2%)
False Negatives	16 (23.5%)	29 (18.8%)
Nominated as Non-Problem	399	154[1]
N below 12	359 (90.0%)	145 (94.2%)
False Positives	40 (10.0%)	9 (05.8%)

[1] Selected as non-problem children

Table 42

Target And Comparison Group Members Who Could Not Be Contacted During Study Three

Reason	Target	Comparison
Total N	166	115
Children left school	4	-
Absent on interview day	20	15
Date of birth not available	5	-
Refusal to cooperate	3	2
Emergency closure of Sch.	-	3
Could not contact as their exams.were approaching	19	-
Number of children contacted	115	95

Table 43

Mean PBCL Score Of Target And Comparison Groups (Sampled From Study Two And Later)

Group		Study Two	Later	F - Value
	N	36	79	df=2,206
Target	Mean	18.78	19.79	1023.3***
	SD	(4.32)	(3.75)	(For Problem Status)
	N	30	65	
Comparison	Mean	03.00	04.37	0.85 ns
	SD	(2.30)	(2.78)	(For being selected in Study Two or Later)

*** $p < .001$

comparison group and for the effect of being sampled in two different ways. The difference between the mean PBCL score of the target and comparison group was significant but the difference due to being selected in Study Two or later was non-significant ($F= 1023.3$, $p <.000$ and $F= 0.847$ respectively, $df=2,206$). These findings indicated that modifying the strategy for sampling children did not affect the degree of emotional and behavioural problems presented by children to a significant extent, as measured by the PBCL.

4.3 Division of the target group into subgroups

When children are selected for presenting emotional and behavioural problems on the basis of their scores on a rating scale, the use of their score on subscales derived from the factor analyses is a common procedure for dividing children into subgroups for showing different types of problems. Several strategies have been suggested in the literature for deriving subscale cut-offs to enable the division. For example, Rutter (1967) suggested that if a child's score on a subscale consisting of externalising type of problems is higher than his score on the internalising subscale, he should be classified as showing externalising problems or vice versa. If the subscores on both externalising and internalising scales are equal, the child should be classified as 'undifferentiated'. However, this approach can be problematic when the number of items in the externalising and internalising subscales are unequal. Others have suggested using statistical criteria such as, the distribution of subscale scores for determining the subscale cut-off points (e.g., Achenbach & Edelbrock, 1986; McGuire & Richman, 1989).

An important finding of Study Two was that the two broad subscales of the PBCL-externalising and internalising- formed by combining the factors derived from its principal components analysis (see Table 40) were more robust and were replicated better across other studies than the factors individually. The scores of children in these two broad subscales (calculated by adding the raw scores of items on each subscale) were therefore used for classifying the target group into subgroups of those showing internalising, externalising and both internalising and externalising problems. Following McGuire and Richman (1989) and Achenbach and Edelbrock (1986), the distribution of scores of children in these two subscales was examined to decide the cut-off points for each subscale. Table 44 shows the distribution of scores of the target and comparison group children in the externalising and internalising subscales and their cut-off points. The children in the target group who scored above the cut-off point of the externalising subscale but were below the cut-off point for the internalising subscale were grouped as those showing externalising problems. The children who were above the cut-off point of the internalising subscales but were below the cut-off point for externalising subscale were grouped as those showing internalising problems. The rest of the children were grouped as those showing both externalising and internalising problems. With this process of classification, of the 115 children in the target group 36 children were grouped as showing predominantly externalising problems, 31 children as showing predominantly internalising problems and 48 children as showing both internalising and externalising problems.

The findings for Study Three are presented in Chapter Eight.

Table 44

Distribution Of Scores Of Selected Children On Externalising And Internalising Subscales Of The PBCL

Externalising Subscale			Internalising Subscale		
Score	Comparison Group	Target Group	Score	Comparison Group	Target Group
0	31	-	0	31	-
1	20	-	1	18	5
2	19	4	2	19	6
3	7	4	3	9	6
4	7	6	4	10	6
5	7	5	5	5	12
6	3	8	6	3	10
7	1	11	7	-	14
8	-	13	8	-	9
9	-	10	9	-	11
10	-	10	10	-	12
11	-	4	11	-	14
12	-	8	12	-	4
13	-	5	13	-	3
14	-	6	14	-	2
15	-	2	15	-	1
16	-	5			
17	-	4			
18	-	5			
19	-	3			
20	-	2			

A score of '8' & above served as the cut-off point for externalising subscale and a score of '7' and above served as a cut-off point for the internalising subscale. An inspection of the table above shows that these cut-offs were chosen because no comparison child scored at or above these points in both the subscales.

PART-II: SOCIAL COGNITIONS IN CHILDREN WITH EMOTIONAL AND BEHAVIOURAL PROBLEMS

It has long been accepted that effectiveness of work with young children in educational and therapeutic settings is enhanced by an understanding of the individual child. If we can understand a particular child's world view and his unique needs and concerns, we can better promote educational growth and healthy development.

(Sroufe, 1983)

CHAPTER FIVE

Relationship Between Social Cognitions And Emotional And Behavioural Problems

5.1 What is social cognition ?

In a general sense, social cognition refers to how children (people) think in their everyday lives about themselves and other people. Social cognition has emerged in recent years as one of the most productive areas of research in understanding children's normal and atypical development. It has served to integrate a diverse body of knowledge. As Westen (1991) puts it,

> "From its roots in traditional cognitive concerns of social psychologists... such as attitudes, person perception and attribution- and in more recent conceptualisations of information processing in cognitive psychology,... social cognition research has begun to have a significant impact on personality psychology as well....This impact reflects, and is reflected in, the emergence of social cognitive approaches to personality...and a growing interest among social cognitive researchers in individual differences in dimensions such as complexity of representations of self...,attributional complexity...,and attributional or explanatory style" (p. 429).

Thus, social cognition research encompasses several topics including person perception, self-concept, attribution, understanding of social relationships, and understanding of others' thoughts, feelings and intentions. Probably for this reason, the definitions of social cognition given by most writers are typically broad. For example, Wegner and Vallacher (1977) define social cognition as "how people think about people" (p. 10). Taylor (1981) defined it broadly as "how people cognise their social world and social relationships" (p. 190). These definitions however, exclude the child's knowledge about himself as a component of social cognition (Lewis & Brooks-Gunn,

1981; 1979). Many early theorists have discussed the intertwining of self-knowledge and knowledge of others (e.g., Baldwin, 1898; Cooley, 1902; Mead, 1934). For example, Baldwin (1898) wrote, "My sense of myself grows by imitation of you, and my sense of yourself grows in terms of my sense of myself. Both ego and alter are thus essentially social; each is a socius, and each is an imitative creation" (p. 338). More recently, Bannister and Agnew (1977) stated this issue as follows, "The ways in which we elaborate our construing of the self must be essentially those in which we elaborate our construing of others, for we have not a concept of self but a bipolar construct of self- not self or self-others" (p. 99). Consistent with these views, Lewis and Brooks-Gunn (1979) provide a more inclusive definition of social cognition. For them, social cognition has three major aspects : "(1) knowledge of self, (2) knowledge of others and (3) knowledge of one's relationship to others" (p. 7). Thus, Lewis and Brooks-Gunn's definition seems to broadly encompass most of the topics covered under the umbrella of social cognition. In the present thesis, the term *social cognitions* is used to express what children think about themselves and their relationships with their mothers, teachers and peers.

5.2 What is the relationship between social cognition and emotional and behavioural problems?

A basic tenet of social cognitive psychology is that the way people think in their everyday life is more or less related with the way they behave (Shantz, 1983; Hartup, Brady and Newcomb, 1983). For example, a child who views a peer to have intentionally broken his toy is more likely to retaliate aggressively than if he infers that the toy was broken accidently (Dodge, 1980). Similarly, cognitions related to 'self' have been considered to have a significant impact on behaviour (Harter, 1983; Epstein, 1973). Based on these assumptions of the link between thinking and behaving,

researchers searching for explanations of children's behavioural problems have begun to explore the role of social cognition in emotional and behavioural maladjustment (Dodge, 1986).

Historically, the study of social-cognitive development and prosocial and antisocial behaviour have grown parallel to each other without much cross-fertilization of ideas (Dodge, 1986). Commenting on the state of research regarding the relation between social cognition and children's every day behaviour, it was only a few years ago, that Damon (1983) quoting Shantz (1975, p. 303) said, "We are not much farther along than when Shantz (1975) wrote, one might well expect that there is good deal of information relating the child's understanding of other people to his actual social behaviour but there is not" (p. 380). His call to researchers was for more work in this area saying "here is an area where empiricism of all types is welcome. We simply need more data linking children's reasoning to their conduct in a wide variety of social settings" (p. 380).

In the past few years however, there has been more interest in understanding the links between social-cognitive, affective and behavioural processes (Renouf & Harter, 1990). The enquiry into social cognitions in children with emotional and behavioural problems has benefitted from this interest. Several factors may have been responsible for fueling the interest in social cognitions of children with emotional and behavioural problems. The increasing recognition of the view that children are active contributors to their social experiences and behavioural organisation (Sroufe & Fleeson, 1988; 1986), may be one of the factors. For example, in discussing the role of strained parent-child relationships in the development of emotional and behavioural problems, Mackinnon et. al., (1990) argue, "Not all children who experience conflictful parent-

child relationships subsequently evince behavioural problems. One reason for such individual differences in response to comparable experiences may be that different individuals reconstruct and interpret their experiences differently, despite objective similarities among them" (p. 1).

Another factor that may have contributed to the emerging emphasis on social cognitions in children with emotional and behavioural problems may be the recent disappointment with the much used operant reinforcement and punishment model for explaining and treating emotional and behavioural problems. The operant model holds that a child's misbehaviour is primarily a function of parental behavioural antecedents and consequences, and that the most effective and efficient way to change a child's behaviour is by teaching his parents to modify their interactions with the child. Greenberg and Speltz (1988) however, from a review of parent training studies concluded, "the empirical results,... lead us to question the belief that operant parent training effectively promotes generalised social competence in the majority of cases" (p. 178). They add, "as developmental psychopathologists, we have been struck by the glaring deficiencies of the operant model.... There has been little or no attention devoted to understanding either the emotional or social-cognitive delays or deficits in either parent or child (or both) that may be an important part of the etiological puzzle that underlies the "conduct problem" (p. 178).

5.2.1 Social-cognitive skills and emotional and behavioural problems

Early efforts to examine the relationship between social cognitions and emotional and behavioural problems in children concentrated on social-cognitive skill deficits. Three social-cognitive skills received the maximum attention: role-taking, empathy and social

problem-solving. While research in this direction has provided support for the hypothesis that social-cognitive skill deficits are associated with socially unacceptable behaviours, refutations of this hypothesis have also been frequently found. Some empirical work carried out to explore the relationship of each of these three social cognitive skills with emotional and behavioural problems is selectively reviewed below.

5.2.1.1 Role-taking skills

Based on the central function assigned to the *role-taking ability* (the ability to recognize or take into account the other person's viewpoint, thoughts, feelings and knowledge) in the normal socialisation process of children by developmental theorists (Piaget and Inhelder, 1956), some researchers were motivated to explain socially deviant behaviours in terms of developmental delays in the acquisition of this ability. Chandler (1973) for example attempted to compare the developmental course of role- taking skills in 11 to 13 year old delinquent and non- delinquent boys. The delinquents were located through a search of files of a metropolitan police registry and were chosen on the basis of their lengthy police and court records. The non-delinquents were reported by their school teachers as not having serious antisocial involvements. Ten cartoon sequences which required the children to describe the sequence first from their own point of view and then from the perspective of a cartoon character who was shown only an abbreviated version of the same stimulus materials, were used to assess role-taking ability. His findings indicated highly significant differences in delinquents and non-delinquents ($F = 80.4$, $df=1, 88$, $p < .001$). The non- delinquents seemed to have little difficulty in adopting the role or perspective of others. The delinquent children, by contrast, typically demonstrated marked deficits in their ability to differentiate their own point of view from that of others, and regularly attributed to the others, the information

available only to themselves. No significant age differences were found in groups of 11, 12 and 13 year old delinquents. The differences in the groups of delinquents and non- delinquents remained the same even after the variance being accounted for by IQ was statistically controlled. Encouraged by his findings, Chandler designed a remedial training program and found the performance of the delinquent subjects to improve considerably. A follow up after 18 months indicated fewer crimes than their baseline by the delinquents. While these findings provided some evidence for differences in the role-taking ability of delinquent children as compared with their non-delinquent peers, they do not provide a basis for inferring a causal relationship between the variables. The findings are also inconclusive because of the follow- up criterion used to assess the effects of the intervention. The fact that the children were not on the police registers obviously does not mean that they did not commit any crimes, rather they might have simply learnt to escape the police.

Selman (1976) in a similar pursuit reported somewhat complementary findings to Chandler (1973). He compared seven to nine year old children attending special schools with children from public schools matched on IQ, social class and race on social perspective taking ability and tasks of logico- physical cognition. While both groups performed equally well on physical cognition tasks, the special school population rated significantly lower on perspective taking ability in social contexts. However, Kurdek (1978) in a study of ordinary school children from first through fourth grades reported contrary findings. Better role- taking ability in his study was found to predict fighting and disruptive behaviours more reliably. The relationship between role-taking ability and socially unacceptable behaviours, therefore, remains uncertain (see Hartup, Brady & Newcomb, 1983 for review).

5.2.1.2 Empathy

Empathy has been defined as a vicarious emotional response of a perceiver to the emotional experience of a perceived object (Feshbach and Roe, 1968). Its role in curbing aggressive behaviours was first hypothesised by Feshbach and Feshbach (1969). They theorised that both cognitive and affective components of empathy lead children who are empathic to behave in more prosocial ways and to refrain from aggressive behaviour. According to Feshbach, the cognitive component enables a child to understand another's perspective during conflict with a peer, thereby reducing the probability that the child will view the peer as deserving of aggressive retaliation. The affective component allows the child to experience vicariously the emotional distress of a victim during an aggressive interaction. This distress, he supposed, should lead to an instinctive withdrawal of aggression. Based on these contentions, Feshbach and Feshbach (1969) predicted that children who behave aggressively would be lower in empathy. They assessed empathy by presenting affectively charged situations on slide sequences accompanied with narrative material to each subject and then asking them how they felt. Aggression was assessed by teacher ratings of the frequency of overt verbal and physical acts of aggression. Their results provided only partial support for their hypothesis, which was limited to boys over five years of age and did not extend to girls at any age or to younger boys. The younger boys contrary to the older ones, if more aggressive, were also more empathic. They concluded that both aggression and empathy in the case of younger boys may be indices of social sensitivity. Dunn (1988) from her home observations of very young children also found that those who were sympathetic to their siblings at one occasion were callous to them on another. Mixed results regarding the role of empathy and aggressive behaviour have also been found by other researchers (See Shantz, 1983 for a further review).

5.2.1.3 Social problem-solving

Social problem-solving is defined as the ability to successfully and appropriately resolve conflicts or problems that arise in interpersonal situations (Spivack and Shure, 1974) and is another social-cognitive skill considered to be associated with emotional and behavioural problems. Spivack and Shure (1974; Spivack, Platt & Shure, 1976) were among the pioneers to posit and empirically explore this relationship. They postulated that the ability to solve social problems (in hypothetical situations) such as acquiring a toy from a peer is largely determined by (1) the capacity of a child to think through alternative ways of solving an interpersonal problem (2) to know the likely response of another to certain solutions and (3) to use means- end thinking (the variety of ways in which an outcome could have resulted). They hypothesised that individuals showing behavioural difficulties suffer from deficits in one of these social problem-solving skills which gets them into difficulties with others. Further, they believed that one who can conceptualise a variety of solutions, who can think of potential consequences of his action, and who sees the prior causal dynamics of interpersonal events, is less likely to suffer the frustration of repeated failure and possible subsequent maladaptive functioning. Findings from their studies show that in particular, the ability to generate a higher number of alternatives to resolve social problems serve as a predictor of emotional and behavioural adjustment and better peer relationships (Shure & Spivack, 1980 & 1979; Spivack & Shure, 1974).

Based on their research findings Spivack, Platt and Shure (1976) designed training programs and were able to show the impact of training in helping children and adolescents to acquire better social skills leading to improvement in actual behaviour. However, not all studies have been able to show a relationship between the ability to

generate solutions to hypothetical social problems and behavioural problems shown by children (for e.g., Krasonar & Rubin, 1981; Rubin & Krasonar, 1986). Similarly, the impact of training has not been consistently useful. From a review of the training studies based on Spivack and Shure's model, Pellegrini and Urbain (1985) concluded that despite the energy and enthusiasm directed towards this type of research, the utility of the model has not been empirically established. The main reasons for this being, the methodological flaws in the training studies, such as no alternate treatment groups, a combination of other treatments along with social problem solving training and dubious reliability and validity of the measurement procedures. Denham and Almeida (1987) reached similar conclusions from a metanalysis of 53 studies.

In contrast to Spivack and Shure's position that the quantity of solutions generated by children to social problems is the critical consideration, Rubin and Krasonar (1986; Krasonar and Rubin, 1981) argued that the quality of the responses generated by children was a better predictor of behavioural problems. In their empirical work in hypothetical as well as natural settings, they found that socially withdrawn children used strategies that involved adult interventions to solve problems, whereas those who were aggressive used more agonistic (i.e. involving force, grabbing or physical attack) solutions.

Thus, the inconsistent evidence from each of these areas casts a gloomy picture of the relationship between social cognition and behavioural problems. Although some of the contradictions may be due to methodological differences in different studies and some due to psychometric qualities of the measures used to examine social cognitions or behaviour problems, it is unlikely that such factors could explain all the failures (Rubin & Krasonar, 1986). However, the assumption in all these researches has been

that the higher the social-cognitive abilities, the better the child's behaviour. Such an assumption is questionable at the outset. As Shantz has pointed out ,

> " Perhaps the most frequently investigated position is that advanced social- cognitive abilities (of various kinds) are positively related to the frequency of prosocial behaviour and negatively related to the frequency of antisocial behaviour. It is unclear... why this position is so widely held, because social... understanding...can be used for social good or evil" (1983, p. 526).

5.2.2 Social information processing and emotional and behavioural problems

More recently, the theoretical relationship between social cognitions and socially undesirable aggressive behaviour has been scrutinised by Dodge (1980; 1986). Unlike others who attempted to explore social-cognitive immaturity in children with emotional and behavioural problems, the essence of Dodge's hypothesis is that the "social cognitions of aggressive children are biased" (Dodge & Frame, 1982, p. 620) and that such biases could lead to interpersonal conflicts and behavioural problems.

Dodge (1986) has proposed a five step model of social-information processing. These steps of social information processing are preludes to behaviour. The steps include encoding social cues, interpreting the cues, response search, selecting a response after evaluating the possible outcomes of an act and finally, enacting the selected response. According to Dodge, a child may behave aggressively if he encodes information inaccurately (or fails to utilize certain cues), or if he fails to interpret the presented cues appropriately (for example attending only to negative cues or overinterpreting hostile intention), or by ineffective evaluation of the outcomes and enacting of inappropriate responses.

Dodge argues that,

> "if the child processes information skillfully, efficiently, and accurately, the probability is great that he or she will behaviourally respond in a manner judged by others to be competent. Failure to respond skillfully at a step or responding in a biased manner increases the probability that the child will behave in a deviant, possibly aggressive, way. Idiosyncratic processing presumably leads to idiosyncratic behaviour" (1986, p. 83).

Dodge's data show that aggressive children overattribute hostile intentions to peers, even in circumstances in which a hostile attribution is not warranted. In one study, Dodge (1980) exposed aggressive and non-aggressive boys to a frustrating outcome instigated by an ambiguously intentioned peer. In response to the ambiguous provocation, aggressive boys demonstrated a bias toward attributing a hostile intention to the peer. Also this attributional bias directly mediated the retaliatory aggressive behaviour of these boys. As a result, the aggressive boys showed retaliatory aggressive behaviour more frequently than did nonaggressive boys. The finding that aggressive boys tend to overattribute hostile intentions to peers has been replicated in other studies (for e.g., Dodge & Newman, 1981; Nasby, Hayden & DePaulo, 1980).

In an effort to find out whether the attributional bias is a global tendency on the part of aggressive children or is restricted to interpretation of others' behaviour to themselves, Dodge and Frame (1982) carried out another study. The former tendency they believed would reflect a *cynical world view*, whereas the latter would reflect a *personalised, paranoid view.* They presented stories to children in which the peer provocateur directed a negative outcome toward the subject or a second peer. Only when the provocation was directed toward the subject did aggressive children demonstrate the hostile attributional bias, thus supporting the hypothesis of a personalised paranoid view. The findings also showed that the aggressive children are

not cognitively immature but have a specific bias that peers are negative toward them. Other studies by Dodge and colleagues have demonstrated that aggressive children's social cognitions in peer related situations are selectively biased and tend to vary with the situations in which they are assessed (Dodge and Feldman, 1990 and Dodge, 1986 for a reviews). Dodge and Feldman (1990) concluded that only a small percentage of variance in aggressive behaviour is explained by social information processing when only a single step of the process is examined. They highlighted the need for more comprehensive assessment of all steps at the same time to make better predictions of aggressive behaviour.

Although the work generated by Dodge's model provides useful information regarding social cognitive biases in aggressive children in peer related situations, it is not clear if the biases would generalise to processing information regarding others- for example, their teachers or mothers. Given the finding that aggressive children have a personalised paranoid view, that is, they are biased only when negative outcomes are directed at them by others (Dodge & Frame, 1982), it is not clear how aggressive children would process information about themselves. The evidence is also limited regarding whether the tendency for biased processing of information would generalise to children who show a range of emotional and behavioural problems as opposed to only aggression. Given the evidence that children who show aggressive behaviour may also show other types of emotional and behavioural problems (Rutter & Tuma, 1988; Achenbach & Edelbrock, 1986), the empirical evidence provided by these studies regarding social cognitions in children with emotional and behavioural problems is limited.

5.3 THE PRESENT FOCUS

Drawing on the core assumption that social cognitions mediate social behaviour, the present study aimed to explore the relationship between social cognitions and emotional and behavioural problems from a different perspective. Broadly, the question to be addressed is: do children who differ in their everyday behaviour in the classroom, differ in the way they think about their everyday life? More specifically, do children who show emotional and behavioural problems in the classroom differ from those children who do not show such problems, in the way they think about themselves and their relationships with their mothers, teachers and peers?

The expectation of differences in social cognitions between children who show or do not show emotional and behavioural problems is also consistent with the work of psychologists with other orientations. Bowlby (1980/1969) for instance, in his work on attachment relationship theorised that children construct working models (internal representations) of the world including themselves from their daily transactions with the caregiver(s), and associated the quality of these 'working models' with their later behaviours. He stated that a child who receives perceptive and responsive parenting, "is likely to possess a representational model of attachment figure(s) as being available, responsive and helpful and a complementary model of self as being potentially lovable and a valuable person" (Bowlby, 1980; p. 280). Such a child, he expected, "is likely to approach the world with confidence and when faced with alarming situations, is likely to tackle them effectively or seek help in doing so" (1980, p. 242). In contrast, a child whose emotional needs have not been met consistently and adequately, develops a view of the world as unpredictable and comfortless and a view of himself as worthless and not deserving of love and attention. Such a child,

according to Bowlby "is likely to respond either by shrinking from the world or by battling with it" (1980, p. 242). Bowlby continued his arguments by describing the working models as resistant but not incapable of change and important in the selecting and shaping of later social experiences. If we can consider children with externalising emotional and behavioural problems as those who are 'battling' with the world and children with internalising problems as those who have 'shrunk away' from the world, we would expect them to differ in the way they view themselves and their relationships with their mothers, teachers and peers, from those who are 'tackling the world more effectively'.

Many studies in the past decade or so, have provided empirical support to Bowlby's theoretical notions (see Belsky & Nezworsky, 1988; Bretherton, 1985). Researchers on attachment have been able to capture individual differences in these 'working models' as reliable and valid patterns of attachment security during infancy (Ainsworth, Blehar, Waters & Wall, 1978). These patterns of attachment security- secure, insecure/avoidant, insecure/resistant have been assessed through the laboratory based observational measure, popularly known as the 'Strange Situation'. In particular, the predictive validity of infant security to later functioning has played an important role in pointing to the conceptual link between attachment and later behavioural problems that Bowlby hypothesised. In studies using the 'Strange Situation' during infancy (12-24 months) to assess attachment patterns, the insecure attachment classification has predicted less persistence and compliance; greater negativism and frustration in problem-solving tasks (Erickson & Farber, 1983); and higher levels of conflictual mother-child interaction (Maslin & Bates, 1982). Infant security, on the other hand, has been associated with higher ego resiliency (Sroufe, Fox, & Pancake, 1983), better peer relations (La Freniere & Sroufe, 1985) and social competence (Cohn, 1990).

A few of the studies in the recent past have provided more direct support for the connection between the security of attachment and emotional and behavioural problems. Erickson, Sroufe and Egeland (1985) reported that teachers of socio-economically disadvantaged children in their sample rated insecurely attached groups as having more behavioural problems than securely attached groups. Lewis, Feiring, McGuffog and Jaskir (1984) reported a significant association for boys between infant attachment and mother's reports of internalising and externalising types of emotional and behavioural problems in their six year old children. They found that 40% of the insecure group as compared to six percent of the secure group scored above the clinical cut-off point on the Child Behaviour Checklist (Achenbach & Edelbroack, 1983). Bates, Maslin and Frankel (1985) also followed children from infancy to six years. At 3 years, 1 year- attachment ratings significantly predicted anxiety problems and showed a moderate relationship to mother's ratings of hostility. However, no relationships were found between teacher ratings of behaviour problems and early attachment status. At age 5 and 6 attachment security was not related to mother reported behavioural problems (Bates & Bayles, 1988) but was related to teacher reported behaviour problems and impulsivity during standard laboratory tests (Olson, Bayles & Bates in preparation cf. Bates and Bayles, 1988).

Until recently however, the measurement of children's security of attachment was limited to the period of infancy and of necessity to a behavioural level. But of late, the focus has extended to later years in life. Following Bowlby (1969; 1973; 1980), the other attachment theorists have suggested that 'internal working models' of the self, and the attachment relationships that mediate attachment behaviour are at the level of representation (Bretherton, 1985; Main, Kaplan & Cassidy, 1985; Sroufe & Fleeson, 1986). They have designed measures involving verbal and non-verbal responses to

assess these internal representations during childhood, adolescence and adulthood, and have replicated attachment patterns similar to those found in the 'Strange Situation' (Main et al., 1985; Cassidy, et al, 1987). Using the measure devised by Cassidy, et al. (1987), two recent studies have documented a significantly higher number of clinic referred children with 'Disruptive Behaviour Disorder' (DSM-III, APA, 1987) to show insecure patterns of attachment as compared with a non-referred comparison group (Speltz, Greenberg & Deklyen, 1990; and Deklyen, 1991).

Thus, Bowlby's (1973; 1980) theoretical ideas, Main's reconceptualisation of individual differences in attachment organisation as "individual differences in the mental representation of the self in relation to attachment" (Main et al., 1985, p. 67) and the related empirical evidence suggest that children with emotional and behavioural problems are likely to think negatively about themselves and their relationships with their mothers, teachers and peers as compared to their counterparts who may not show emotional and behavioural problems.

'A link between how children view themselves and their relationships, and their emotional and behavioural problems is also discussed in the traditional self-concept theories. Damon, Hart and Schorin (1988) explain that the assumption underlying this orientation is that children's success in negotiating the challenges of interpersonal relationships, school work, and intrapersonal crises derive from the degree to which they like themselves. A child with a negative view of self or low self-esteem is considered most likely to develop adjustment problems in virtually every sphere of life. For instance, Coopersmith (1967), argues for children who have a high self-esteem: "They approach tasks and persons with the expectation that they will be well received and successful. They have confidence in their perceptions and judgements and believe

that they can bring their efforts to a favorable resolution. Their favorable self-attitudes lead them to accept their own opinions and place credence and trust in their own judgements when there is a difference of opinion and also permits them to consider novel ideas (p. 70-71). Similarly, Vallacher, Wegner and Hoine (1980) have noted, "self-theories should have something to say about person problems. After all, if self principles are implicated in much of our daily living, then surely the difficulties in living should be explainable with reference to those principles as well" (p. 25).

In the traditional psychodynamic literature as well, positive self-regard and self actualisation are considered conducive to being socially well adjusted (Rogers, 1951; Axline, 1947). Following the tradition of the self-concept theories and the psychodynamic literature, a common clinical assumption has been that children with emotional and behavioural problems have a negative view of themselves. Some studies have explored this relationship in the past but the findings have been inconsistent. For example, Zimet and Farley (1984) found that 75% of the 68 children referred to day psychiatric treatment had a positive view of themselves. But Piers (1977) found that clinic referred 8-14 year old children had significantly lower scores indicating a lower self-concept than the normative sample, though scores for both the groups were in the positive range. Bloom, Shea and Eun (1979) reported similar findings. They compared the mean self-concept scores from a group of 270 6-12 year old deviant children to the norms provided by Piers and Harris (1969) for non-deviant children. The deviant children scored significantly lower than the norms but the mean scores of both groups were within the normal range, although the variance in scores of deviant children was relatively higher. Similarly varying findings have also been reported by others (Cohen et al., 1985); McConaughy et al., 1988 and Compas, et al, 1991).

As discussed in Chapter One emotional and behavioural problems are broadly of two types- internalising and externalising. The coexistence of these problems has also been documented (Rutter & Tuma, 1988; Achenbach, 1988; Achenbach & Edelbrock, 1986; 1983*a,b*), so that some children are likely to show either externalising or internalising problems, whereas others might show both types of problems. Would children showing internalising, externalising or both types of emotional and behavioural problems differ from each other in the way they think about themselves and their social relationships?

Some theorists have suggested a self-deprecating style in the social cognitions of depressed individuals. For example, Beck (1967) argued that depressed persons have a systematic negative bias in their thinking that leads them to have a negative view of themselves, their world and their future. A historical precedent to expect the depressed to view themselves as worthless also comes from the psychoanalytic tradition (Bibring, 1953). Although the initial suggestions were for adults, recent empirical work has provided some evidence for the applicability of Beck's model to social cognitions in depressed children and adolescents (e.g., Renouf & Harter, 1990; Meyer, Dyck & Petrinack, 1989; Kaslow, Rehm & Siegel, 1984). These researchers have consistently shown a tendency towards negative self appraisal in depressed children. Some symptoms of depression, for example feeling sad, moody, lonely have been found to be subsumed in the broad category of internalising emotional and behavioural problems (Achenbach & Edelbrock, 1983*a*; Achenbach & Edelbrock, 1986). Would a self- deprecating tendency found among the depressed extend to children showing broadly internalising problems?

Unlike depressed children, the picture regarding how children with externalising problems appraise themselves is very inconsistent. Some previous investigations with older children and adolescents have indicated that children who are aggressive tend to rate themselves lower on self-esteem than non-aggressive children (Lochman and Lampron, 1986). On the other hand, Schneider and Leitenberg (1989) indicated that the aggressive children did not differ in self-esteem from the non-problem cases but had higher self-esteem than those who were rated as withdrawn. Equally inconsistent are the findings for those children who show broadly externalising problems including problems of aggression, hyperactivity, poor concentration, conduct problems. Cohen, Gotleib, Kershner and Wehrspann (1985) did not find a difference in self-esteem of internalisers and externalisers but McConaughy, Achenbach & Gent (1988) in a study of clinic-referred boys found that externalisers denied more negative statements about themselves than did internalisers.

Recent research indicates that young children showing both types of problems together- internalising as well as externalising - tend to be less liked by their peers and are less popular (e.g. Landau & Milich, 1985) and do more poorly in academic tests when compared with solely aggressive children (Ledingham & Schwartzman, 1984). Asarnow (1988) found that children with concurrent depressive and externalising problems were more peer rejected, less liked and less socially competent than children who were solely depressed children. It is possible then, that these children differ from the other groups i.e. those with internalising or externalising problems- in the way they view themselves and their relationships with others. Some evidence for this effect also comes from a study by Schneider and Leitenberg (1989) who found that those who had both aggressive and withdrawn behaviour problems reported that they viewed themselves negatively in comparison with aggressive children but not as compared to

those who were solely withdrawn. However, whether similar findings would appear in those showing a broad range of the externalising and internalising problems has not been demonstrated.

Furthermore, it is not clear if this tendency to view oneself as higher, lower or equal to others among children with externalising, internalising or multiple problems extends to children in the first year of primary school as previous analyses have limited themselves to older age groups.

Despite the theoretical interconnection between how children view themselves and their relationships (see p. 175 & 214 this thesis), for the most part researchers have limited themselves to the study of how children with emotional and behavioural problems view themselves. It is also not clear if these tendencies would extend to how children view their relationships with their mothers, teachers and peers. The present study hoped to address these issues. Specifically, the study aimed to explore how children with emotional and behavioural problems differ from those who do not show such problems in the way they think about themselves and their relationships with their mothers, teachers and peers. Another aim was to explore the differences in social cognitions of children showing externalising, internalising and both externalising and internalising problems.

Knowledge regarding how children with emotional and behavioural problems differ in the way they think about themselves and their relationships with their mothers, teachers and peers is important not only from the point of view of a theoretical interest in understanding coherence between social cognitions and social behaviour but also

has practical relevance in helping children who show emotional and behavioural problems. As Hymel and Franke (1985) put it,

> "Notably absent within the assessment literature is consideration of the child's own perspective on his or her social situation. Our ultimate aim is to help these children function more effectively or positively within their social world, yet we know very little about how they themselves perceive that social world, and how self- perceptions influence subsequent interpersonal behaviour and the effectiveness of intervention programs" (p.75).

CHAPTER SIX

Exploring Social Cognitions In Young Children

As discussed in the previous chapter, the present research focused on exploring children's view of themselves and of their relationships with their mothers, teachers and peers. This chapter deals with the conceptual and methodological issues in exploring the view of the self and of social relationships.

6.1 The view of the self

> *The very concept of 'self' appears so abstruse, and that to which it refers so elusive, that one can feel at a loss even to formulate the problem or cluster of problems to be addressed.*
>
> *Hobson (1991)*

6.1.1 Introduction

The view of the self, also referred to as self-concept and sometimes used interchangeably with self-esteem, broadly, refers to our own thoughts, feelings or knowledge about our abilities, skills and social acceptability (Byrne, 1984). Historically, the concept of 'self' has been viewed with suspicion. In the earlier days of introspection and philosophical analysis, the 'self' was a popular topic. But as behaviourism and more objective scientific enquiry dominated the thinking in psychology, the topic of the self was avoided on the grounds that it was not observable (Harter, 1986). Behavioural psychologists considered the concept of 'self' as having "an aura of mysticism" (Epstein, 1973, p. 404) and the above quote from Hobson (1991) suggests the skepticism that surrounds the concept of self, even after several years of research on this topic. However, despite the ups and downs of its importance in the discipline of psychology, the self is currently a popular topic with psychologists of various

orientations including developmentalists (Harter, 1986; 1985 and 1983; Damon & Hart, 1982; 1988) social learning theorists (Bandura, 1979), cognitive- attributional theorists (Abramson, Seligman & Teasdale, 1978), educational psychologists (Marsh, 1990; Byrne, 1984), attachment theorists (Cassidy, 1988; Sroufe, 1983), social- cognitive psychologists (Fisk & Taylor, 1984), object relations theorists (Westen, 1991) as well as among clinicians who believe in cognitive-behavioural models of treatment (Beck, 1967; Kovacs & Beck, 1977).

The current conceptualisations of the self and its measurement are largely influenced by the views of some early theorists. It will therefore be useful to briefly consider the historical perspective.

6.1.2 Brief historical perspective

In the earlier days, despite the lack of attention from those who believed rigidly in behaviourism and objective measurement, the topic of 'self' received a place in the influential writings of many scholars including James (1891), Baldwin (1898), Cooley (1902) and Mead (1934). James (1891) was one of the first psychologists to write extensively on the self and his theorizing has had a crucial impact on contemporary views of the 'self'. He articulated two distinct but intertwined aspects of self : 'I' and 'Me'. 'I' according to James' was self as subject or as knower, and, 'Me' represented the self as object of one's knowledge or an empirical aggregate of what is known. The self as subject for James could not really be measured and did not affect behaviour. James was therefore primarily interested in 'Me' or the 'empirical self' and his analysis of the self primarily applied to adults. The empirical self for James included three components, classed in a descending order of their importance in self esteem: spiritual

self, social self and material self. All these components of self, according to him combined in a unique fashion for each individual and constituted each person's global view of himself. But each component, he thought, had the potential of evoking heightened or lowered self-esteem. He considered that every one wants to maximise all of the various 'selves' but due to limitations of time and talent, each person chooses areas of self-regard or self-esteem (used interchangeably). Having chosen the important aspects, our level of self regard can be reduced only by deficiencies or raised by achievements which are relevant to the selected aspects or what James called 'pretensions'. In a famous passage, James (1891) explained this principle of self-esteem, in a personal example,

> "I, who for the time have staked my all on being a psychologist, am mortified if others know much more psychology than I. But I am content to wallow in the grossest ignorance of Greek. My deficiencies there give me no sense of personal humiliation at all. Had I 'pretentions' to be a linguist, it would have been just the reverse. So we have the paradox of a man shamed to death because he is only the second pugilist or the second oarsman in the world. That he is able to beat the whole population of the globe minus one is nothing; he has 'pitted' himself to beat that one; as long as he doesn't do that nothing else counts. He is to his own regard as if he were not, indeed he *is* not.
>
> Yonder puny fellow, however, whom every one can beat, suffers no chagrin about it, for he has long ago abandoned the attempt to 'carry that line', as the merchants say, of self at all. With no attempt there can be no failure; with no failure no humiliation. So our self- feeling in this world depends entirely on what we back ourselves to be and do.... To give up pretentions is as blessed a relief as to get them gratified; and where disappointment is incessant and the struggle unending, this is what men will always do" (p. 310-11).

Thus, according to James, our view of our self derives partially from our perceptions of where we see ourselves standing in relation to others whose skills and abilities are similar to our own particular self images, and to what we stake ourselves to be.

Like James, Baldwin (1898), Cooley (1902) and Mead (1934) also focused on 'Me' or self as an object of one's knowledge. However, they highlighted the role of social interaction in the development of self. Baldwin (1898) was among the pioneers to suggest the role of others. He saw the self and the 'alter' (the other person) as two poles of one entity. Baldwin's central idea can be summarised as follows : "My sense of self grows by imitation of you, and my sense of yourself grows in terms of my sense of myself. Both *ego* and *alter* are thus essentially social, each is socius, and each is an imitative creation (1898, p. 338)". For Cooley (1902) as well, the sense of self is linked with the sense of other people. He introduced the concept of the "looking glass self", which suggested that an individual's sense of self reflects what he thinks others think of him. The looking glass reflects the imagined evaluations of others about one.

> Each to each a looking glass,
> reflects the other that doth pass
> (1902, p.152)

"..so in imagination we perceive in another's mind some idea of our appearance, manners, aims, deeds, character, friends and so on" (Cooley, 1902; p.183), which form our sense of self. Further he noted that what is labelled by the individual as 'self' produces stronger emotions than what is labeled as nonself, and that only through subjective feelings can the self be identified.

Similarly, Mead (1934) asserted that the sense of self develops gradually through social interaction. He expanded Cooley's ideas of the looking glass self and like James (1891) assumed that there are several selves. For him the self concept arose as an outgrowth of the individual's concern about how others react to him. The core of Mead's approach is that self develops through the active process in which a person accepts as his own ideas of himself those he perceives others to hold of him. Mead

introduced the idea of the "generalised other". The attitudes of entire sets of others with whom the individual interacts. He stated, "The organised community or social group which gives to the individual his unity of self may be called the generalised other... the attitude of the generalised other is the attitude of the whole community" (Mead, 1934; p. 154).

Sullivan (1953), although working within a psychoanalytic perspective, had an interpersonal emphasis rather than an intrapsychic one. In the social interactionist tradition of Baldwin, Cooley, and Mead, he believed that the self is learned through 'reflected self appraisal'. Unlike Mead's 'generalised other' notion, however, he highlighted the role of significant others. Elaborating on the role of significant others, he said that a child internalises those values and prohibitions that facilitate the achievement of the satisfaction in ways that are approved by significant others.

Lecky (1945) discussed the role the self played in human functioning and referred to the view of self as a nucleus of personality which had a role in the organisation of the personality. Snygg and Combs (1949; Combs & Snygg, 1959) along with emphasising the role of family members in the development of the self, discussed the issue of the stability of the self. They also viewed the self as a nucleus of a broader organisation which contains incidental and changeable as well as stable personality characteristics.

Bowlby (1980) largely discussed the topic of self in terms of its deep relationship with the view of attachment figure(s). For Bowlby as mentioned earlier (see Chapter Five), there is an inextricable intertwining of the working model of self and the working model of attachment figure (s). Over time, the child comes to believe that his mother will behave in certain predictable ways. Based on these experiences, the child

simultaneously develops a complementary view of himself. For example, if the child is loved and valued, he comes to feel lovable, valuable and special. If however, the child is neglected or rejected, he comes to feel worthless and of little value.

Following the different characteristics ascribed to the self by various theorists, Epstein (1973) conceptualised the self as a self theory. He asserted, "self-concept is a self theory. It is a theory that the individual has unwittingly constructed about himself as an experiencing, functioning individual, and it is part of a broader theory which he holds with respect to his entire range of significant experience" (p. 406). Several other writers have discussed the topic of the self along similar lines (see Harter, 1983 and Epstein, 1973 for reviews).

6.1.3 Contemporary models of the self-concept

Following the extensive writings by several theorists; psychologists, clinicians and educators attempted to look for empirical referrents of the self. Initially, a general or total view of self was examined. Those persuaded by James's (1890) writings, however, challenged this approach and argued that failure in unimportant aspects of life had little impact on the general self-concept of an individual. They therefore, urged the need to examine a more differentiated view of the self. Following the differences of opinion among the researchers regarding what the self is and how it should be conceived, Harter (1986) has identified six contemporary models of conceptualising the self (also see Byrne, 1984 for contemporary conceptualisations of the self-concept). These models can be understood best by the way the self is measured in each model.

1. Unidimensional model: In this model, self-concept is viewed as a unidimensional construct or a summative idea. A set of items dealing with a range of content, for example, items related to academic abilities, friends and family are presented to the child. Each item is scored giving equal weight and the score is summed across all items to derive a single score which represents one's sense of self (e.g., Coopersmith, 1967). This type of conceptualisation disregards the distinctions children make in the different domains of the self, articulated by early theorists (e.g., James, 1891) and shown empirically by several researchers (Harter, 1982; see Byrne, 1984 for review). Although studies conceptualising the self as a unidimensional construct are less common, they are not extinct. For example, Schneider and Leitenberg's (1989) and Zimet and Farley's (1984) studies mentioned in Chapter Five measured self-concept in children with emotional and behavioural problems as a unidimensional construct.

2. Multidimensional model: This conceptualisation supports the notion that self-concept has many dimensions (for example, cognitive competence, physical competence, behavioural competence and so on), together with the expectation that the view of the self in one domain may be independent of the view in the others (for example, Harter, 1982; Mullener & Laird, 1971). In other words, the belief is that a child might think he is bad at doing sums but may think highly of his skill in jumping a rope. Early efforts to study the self as a multidimensional concept, however, found little empirical support. For example, Winne, Marx and Taylor (1977) in their mutitrait-multimethod investigation of three inventories could not identify independent dimensions of the self. They concluded that "although there was consistent evidence favouring the convergent validity of a physical facet, a social facet, and an academic facet, little support could be shown for discriminant validity for any of these three logical facets" (p. 899). However, the three inventories -Sears' Self-concept Inventory

(Sears, 1966); Gordon's How I see Myself Scale (Gordon, 1968); and Piers-Harris' Children's Self-concept Scale (Piers and Harris, 1969)- used by Winne et al. (1977) were designed to measure a global view of the self and included a hodgepodge of items from several domains from which they attempted to identify the three facets of the self. More recent efforts using a priori scales have successfully demonstrated the existence of multiple dimensions through statistical procedures like factor analysis (for e.g., Harter, 1982; Harter & Pike, 1984; Marsh & Gouvernet, 1989)

3. Hierarchical model: Shavelson, Hubner and Stanton (1976) proposed a model of the self-concept, which was multidimensional as well as hierarchical. They conceptualised seven major features of the self-concept. The self-concept for them was (a) organised and structured, in that people categorise information they have about themselves and relate these categories to one another; (b) multifaceted, and the particular facets reflect the category system adopted by a person or shared by a group; (c) hierarchical, with quite specific self-perceptions at the base moving to inferences in sub-areas and then to the self in general at the apex; (d) stable at the apex of the hierarchy, but as one descends the hierarchy it becomes more situationally specific and thus less stable; (e) better differentiated for older children with facets becoming more distinct with age; (f) both evaluative and descriptive; and (g) differentiable from other constructs.

Shavelson et al. (1976) also presented a possible representation of this model where general self appears at the apex and is divided into academic and nonacademic self-concepts at the next level. Academic self-concept is broken into self-concepts in particular subject areas (e.g., English, Maths, History). Nonacademic self-concept is divided into three areas: social self-concept, which is broken into relations with peers

and with significant others; emotional self-concept; and physical self-concept, which is broken into physical ability and physical appearance. Further levels of division are hypothesised for each of these specific self-concepts.

Shavelson et al.'s model originally had an appeal for researchers who were disappointed with the unidimensional model of conceptualising the self. However, problems in operationalising this sophisticated model soon lead to its criticism. As Harter (1986) puts it, "...we need to be clear about what we are hierarchizing, as well as what measurement strategy our conceptualization dictates. For example, do the lower level postulates in the self-system, such as the social, emotional, and physical self-concepts... represent separate discrete factors? If so, in what sense do they combine to make the more general nonacademic self-concepts? Is this to be thought of as a higher order factor? Moreover, does it reflect the phenomenological experience of the person, do we carry with us a nonacademic self-concept per se? Does the overall general self-concept at the apex represent yet an even higher order factor, and if so, how are the lower order postulates actually combined" (p. 140).

She added, "Such models are also problematic because certain domains may be more important to one's overall sense of self than others; yet, domains are not differentially weighted in terms of their importance to the self. On balance,... it would seem that models of this type have heuristic value as an aid in organising our thinking about the possible dimensions of the self-system. They may also allow us to test broad relationships among the constructs in the network. However, they appear to represent a conceptual model in the minds of theorists, not the phenomenological network of constructs that defines the self-concept of individual subjects" (p. 140-141).

Consistent with Harter's (1986) arguments, empirical examinations of Shavelson et al.'s (1976) model found little support for hierarchical organisation of the self-concept (Marsh and Shavelson, 1985). Also, in contrast to the original position of Shavelson et al. (1976) that the different areas of the academic self-concept (e.g., English, math self-concept) would be substantially correlated, and could be incorporated into a single higher-order facet of academic self-concept, Marsh, Byrne and Shavelson (1988) found that English and Math self-concepts were uncorrelated and that two higher order facets of academic self-concepts- verbal/ academic and math/academic- would be necessary instead of just one.

4. Compensatory model: This position, proposed by Winne and Marx (1981), suggests that the specific facets of the self are inversely related, rather than proportionally or independently related as proposed by the hierarchical or multidimensional models (Byrne, 1984). Accordingly, lower status on one facet or dimension of the self might be compensated by higher status on another dimension of the self-concept. Empirical findings have provided some support to Winne and Marx's proposal (Winne, Woodlands & Wong, 1982).

5. Rosenberg's unidimensional model: Rosenberg (1979), unlike the unidimensional model mentioned earlier in which items from several aspects of life are summed to derive a single score representing a general view of the self, argued that the discrete facets of the self are important but cannot be measured empirically. He suggested that the various domains of the self are weighted, hierarchized and combined according to an extremely complex equation, of which the individual may be unaware. He therefore chose to assess a global view of the self and constructed an instrument which taps the

degree to which the individual is generally satisfied with himself- feels he has good qualities, has self-respect, and a positive attitude towards himself.

6. Combination model: Following a review of different points of view, more recently Harter (1986) proposed a combination model which combines different approaches. This model emphasises that one needs to account for the multidimensional nature of the self as well as one's global self-worth, which is a superordinate structure. The instruments designed in accordance with this approach include separate specific domains of self as well as an additional aspect for a general view of the self. Thus, in addition to deriving the score separately for each domain, a separate score of general view of self can be worked out, not by adding the scores across different domains but from the separate scale derived for this purpose. The empirical investigations employing factor analysis have shown the emergence of a separate subscale representing a general view of the self along with the domain specific subscales (Harter, 1982; see Byrne, 1984 for review)

6.1.4 Different methods for measuring the view of the self

Generally, three types of methods are used to study the self: self- reports; behaviour observations; and projective techniques. Each method has its own strengths and weaknesses. The self-report measures involve verbal or literary skills, both of which may involve difficulties of communication. Since self-report measures involve direct questioning about oneself, there is always the danger that children will present themselves in a positive light giving socially desirable answers. However, an alternative explanation for too many positive responses on a measure of the self has been to interpret this as the child's defensive tendency or inability to admit any flaws. It is

therefore, considered important in measurement (Cassidy, 1988; Hughes, 1984; Crandall, Crandall & Katkosvsky, 1965), since it may represent a poorer view of the self. There are many other factors which have caused the validity of self-report measures to be criticised. As Purkey (1970) puts it, "While the self-concept is what an individual believes about himself, the self-report is only what he is willing and able to disclose to someone else" (p. 60).

Wylie (1961) identified still other factors that might affect self-reports of self-concept. She wrote,

> "Phenomenologists would like to assume that a subject's self-report responses are determined by his phenomenal field. However, we know that it would be naive to take this for granted, since it is obvious that such responses may also be influenced by the: (a) subject's intent to select what he wishes to reveal to the examiner, (b) subject's intent to say that he has attitudes or perceptions which he doesn't have (c) subject's response habits, particularly those involving introspection and use of language and (d) host of situational and methodological factors which may not only induce variations in (a), (b), and (c) but may exert other more superficial influences on the responses obtained" (1961, p. 39).

One basis for doubting the accuracy of self-report measures of the self has been that they do not predict objective reports. For example, the accuracy of a child's self-report of academic competence may be doubted on the grounds that it does not match the objective (or external) measures of academic competence. But Marsh (1990) has explained that questioning the validity of self reports on such a basis reflects a "functional confusion" about the nature of self-concept. He states, "academic self-concept measures are designed to reflect individuals' self-perceptions whether or not they agree with objective indicators of academic achievement or perceptions of others. Academic self-concept measures may lack validity for the purpose of predicting academic achievement, but this is not their intended purpose. It also follows that

academic achievement measures lack validity for the purpose of predicting academic self-concept" (Marsh, 1990; p. 107).

Most researchers agree that self report measures succeed in obtaining information which comes closest to what the 'self' is all about (Wylie, 1979; Harter, 1982; 1983; 1986). If the self means personal, subjective and conscious evaluation of what a person thinks he is, then his self reports are as far as we can get. Damon and Hart (1988) write, "the notion of "self" typically refers to the personal experience of individuality. The nature of this experience, therefore, is determined mainly by the subject, and is not matter for consensual validation... Unlike other concepts, self-concept remains in essence wholly personal and individually defined" (p. 3).

Many researches in the past have shown that such self-reports are capable of being reliable. Harter and Pike (1984) found an internal consistency of 0.80 in their self-report measure of children's perceived competence and social acceptance. Wheeler and Ladd (1982) reported an internal consistency of 0.85 for reports of self-efficacy by children. Coopersmith (1967) reported a test-retest reliability of the self-esteem inventory developed by him to be 0.70 over a period of three weeks with 9-15 year old children. Piers (1977) found a correlation of 0.75 between Piers-Harris children's self-concept measure (Piers and Harris, 1969) and Coopersmith's self-esteem inventory (Coopersmith, 1967; see Hughes, 1984 for a review of reliability and validity of self-report instruments of self-concept).

Another advantageous feature of self-reports is that unlike projective techniques, one can have some faith that the individual is talking about the self, whereas in projective tasks one could be talking about a favourite film star. Projective techniques on the

other hand have the advantage of being indirect and less prone to problems of social desirability. Behavioural observations, though reliable and objective may not refer to what the individual thinks and feels about himself. Additionally, unless observations are made over a substantial period of time, the conclusions may be premature.

6.1.5 Existing Instruments for measuring the self-concept of children

Until recently, the most widely used instruments for measuring the self-concept of children included: the Coopersmith Self Esteem Inventory (Coopersmith, 1967) and the Piers-Harris Children's Self-Concept Scale (Piers, 1969). The Coopersmith Inventory consists of 50 items drawn from a Self-esteem Iventory designed for adults (Rogers and Dymond, 1964). These items cover four areas- peers, parents, school and personal interests. The problem with the Coopersmith Inventory is that the items refer to varying levels of generality but the scores across all items are summed to derive a single score assigning equal weight to all items. Wylie (1974) claimed that the tests for its construct validity were not adequate. Coopersmith (1967) reported inter-rater correlation between pupils and teachers for pupils' self-esteem to be 0.73. However, Norwich (1979) found a comparable coefficient using this scale to be - 0.32.

The Piers- Harris Scale (Piers & Harris, 1969) is an 80-item paper-pencil test. It is an improvement over the Coopersmith Inventory in that questions included are those relevant to children. However, like the Coopersmith Inventory this scale does not consider the value children might place on different domains of self and scores across all items are summed to derive a single score for self-concept. Later studies have attempted to carry out factor analyses on this scale to explore the different dimensions that it measures. However, no interpretable dimensions have been found in such

studies (c.f. Harter, 1986). Both the Coopersmith Inventory and the Piers-Harris Scales are designed for use with older children. A downward extension of the Piers-Harris Scale has since been designed but published information on its reliability and validity is currently not available. Both these instruments include a binary choice between 'yes' and 'no' for each item which predisposes them to be more unreliable and may be prone to evoke socially desirable answers from children (Hughes, 1984).

Another recent instrument for measuring the view of the self is the Self-Description Questionnaire (Shavelson et al., 1976). This scale matches Shavelson et al.'s model (1976) discussed earlier and measures a child's view of himself in specific domains. It is meant for older children and adolescents, and is heavily biased towards assessing academic self-concepts.

Another increasingly used self-report measure is the Perceived Competence Scale for children (Harter, 1982; Harter and Pike, 1984). This measure is designed to parallel Harter's conceptual 'combination model of self' which ascribes importance to a child's view of himself in different domains as well as to a general view of the self. Unlike, many other existing measures (e.g., Coopersmith, 1967; Piers & Harris, 1969), it separately assesses the child's view of his own competence and social acceptance in multiple domains. This instrument offers several advantages over the other existing measures. It has been designed with special attention to developmental and psychometric issues involved in measurement of the children's view of the self. In order to take into account the children's developmental level, three versions of the scale have been designed: for preschoolers; for first and second graders; and for the older children and young adolescents. The items in each scale have been selected on an *a priori* basis to match children's everyday experiences and abilities. For example,

to explore how preschoolers view their cognitive competence, the scale includes items such as: good at puzzles; knows names of colours; good at counting, and to explore cognitive competence in the first and second graders, items such as: good at writing words; can read alone; good at spellings are included. In order to retain a young child's attention on the task, unlike the version for older children and adolescents, the scales designed for younger children have a pictorial format. The responses of children are sought on a four-point scale (instead of the usual true/false response system) which offsets the tendency to give socially desirable answers (Harter & Pike, 1984). The pictorial scales present the response categories in the form of different-sized circles which assist young children in choosing their response more easily. The children can even respond by pointing their finger to the circles, which make the scale particularly suitable for groups of children who might be shy to speak.

The findings from statistical analyses have shown that the scales are internally consistent and have a reliable factorial structure. Consistent with her theoretical assumptions, Harter (1982) found that in factor analysis of the scales, children's view in different domains loaded on separate but related factors. In a study of 341 children in the third to sixth grades, Harter (1982) found four oblique factors from promax rotations of the Perceived Competence Scale: cognitive competence, social competence, physical competence, behavioural competence and general self-worth. In factor analysis of the Pictorial Perceived Competence and Social Acceptance completed by younger children, Harter and Pike (1984) found that only two reliable factors emerged. The first factor included children's perception of their own cognitive and physical competence, and the second factor included their view of their maternal and peer acceptance. These findings supported Harter's conceptualisation (Harter,

1983; 1986) that the view of the self becomes better differentiated as children grow older.

Considering the evidence for the reliability and factorial validity of Harter's instruments, together with their pictorial nature, the Harter's scale designed for first and second grade children was used in the present study. This scale- the Pictorial Scale of Perceived Competence and Social Acceptance (Harter & Pike, 1984) measures the children's view of their own cognitive and physical competence and their view of their acceptance by their mothers and peers. Harter claims that children's perceptions in these areas are related to their sense of self. In the present research the aim was to find how children who show emotional and behavioural problems differ from their non-problem peers in the way they think about themselves and their relationships with their mothers, teachers and peers. The scale seemed particularly relevant for this purpose. Additionally. the scale has been used successfully with special groups of children, for example, maltreated (Vondra, Barnet & Ciccheti, 1989), asthmatic (Pike, 1985), peer-rejected (Patterson, Kupersmidt & Griesler 1990), children with emotional and behavioural problems (Compas et al., 1991), children with problems of clumsiness (Losse et al., 1991) and children born prematurely (Henderson and Jongmans, 1991 personal communication).

However, this scale does not include a child's view of acceptance by the teacher. This is surprising in view of the emphasis Harter places on specific domains of children's life and their relevance to the children's sense of self. For young school children, the teacher is a significant adult in life. Just as peer acceptance and maternal acceptance are theoretically related elements of the positive view of the self, feeling accepted by the teacher is important in the life of a child, especially in the first year of primary

school, which as discussed in Chapter One is a crucial transitional phase in the child's life. Considering the importance of this aspect, a teacher acceptance subscale was designed and added to this scale in the present study. It is described in Chapter Seven along with the original Harter Scale and the other instruments used in the present research.

Although Harter (1986) has proposed a combination model for measuring the view of the self which include the view of the self in different domains and a global view of the self, her scales for younger children do not include a subscale to measure a general view of the self. Harter's argument for this is that young children do not have the cognitive sophistication articulated by Rosenberg (1979) to make judgements about an overall view of the self. She draws from cognitive-developmental theorists to say that the preoperational child does not yet possess the role-taking skills necessary to cognitively construct Cooley's 'looking-glass self' or to invoke Mead's 'generalised other' and therefore, cannot make global judgements about the self. She asserts that the view of self in younger children can best be assessed by measuring the specific empirical referrents. She writes, "It had been our conviction, derived from general developmental theory, that children would not be able to make meaningful judgements about their worth as a person until approximately the age of 8. The very concept of "personess" as a generalization about the self as a global entity, is not yet firmly established among younger children. As a result, we reasoned, young children cannot make judgements of global self-worth, although they can evaluate their performance in particular domains of their lives" (Harter, 1986, p.144-145). She further cites empirical support for these conclusions from her unpublished studies with mentally retarded children whose mental ages were similar to those of younger children and in which a global self-worth scale did not emerge as a separate factor as it did for the

normal children. She writes, "The cognitive-developmental basis for the construction of such a global concept about the self was also brought home to us in our study with the mentally retarded. Although we gave these grade-school retarded children the questionnaire version of the scale designed for their normal IQ peers, we found that the self-worth subscale did not emerge as a separate factor as it did for the normal sample, nor did the self-worth items systematically or meaningfully load on any factor. Given that the mental ages of the retarded pupils approximated these of our young, normal IQ children, whom we predicted would not yet have developed a general sense of self, these findings were not surprising. In fact, they bolstered our conviction that global self-worth is a complex cognitive construction that does not emerge until approximately the mental age of 8" (Harter, 1986; p.145).

Cassidy (1987), however, argued that a continually growing body of literature, suggests that the young child does indeed have perspective-taking and other skills said by Piaget not to occur until age seven. She further argued that if a child at age eight is likely to have a global view of the self, it does not "*spring forth overnight*" (Cassidy, 1987, p. 33). There are likely to be precursors at earlier ages. Cassidy therefore, designed two measures of global self-esteem which consist of 20 questions each for use with six year old children. These questions aim to capture the children's view of themselves in a general way. For example, are a good boy/girl,, do you like yourself? One of these instruments- the Puppet Interview- provides a friendly and playful way to talk to the young children about themselves. The use of a puppet makes the situation non-threatening for the children and conducive to responding by young children. This measure was used in the present research for exploring a global view of the self in children- a domain not measured by the Harter Scale. Since the children in the present study showed emotional and behavioural problems, the friendly nature of this task was considered to be an asset and a factor in its selection. This measure is also described in Chapter Seven with the other instruments.

6.2 Children's view of their relationships with their mothers, teachers and peers

Children's social world consists of rich networks of close relationships (Hartup, 1989; Furman and Buhrmester, 1985). In the study of this network, within the field of developmental psychology and psychopathology, relationships with mother and peers have found particular attention. Several writers have pointed out the various roles a mother often plays for the child right from the time he is born until many years after. She is the caregiver, a social interactant, a playmate, a teacher and an attachment figure (Crittenden, 1988). Peers and more so friends, play the significant roles of being playmates, companions, trusted confidants, critics, loyal allies and providers of emotional support (Asher, 1990). Significant importance has also been attached to the role of a teacher in a child's life, especially at the time of entry to school, when a teacher acts not only as an educator but also as a facilitator of a child's socialisation and as a mother figure more generally. The literature emanating from the attachment paradigm in recent years, has elegantly demonstrated the long-term effects of the quality of relationship shared by a child with the mother (see Brethernten, 1985), its connection with social competence (Cohn, 1990) and later adjustments (Lewis et al., 1985). Many recent studies have also demonstrated the significant role of peer relationships with children's mental health (Kupersmidt, Coie and Dodge, 1990; Parker & Asher, 1987 for reviews; Kupersmidt et al., 1991). Rejection from peers in particular, has been shown to be a 'risk-factor' for the development of emotional and behavioural problems (Asher, Parkhurst, Hymel & Willams, 1990; and Cowen et al., 1973).

In comparison, little attention has been paid to how children's own thinking about their social relationships is associated with their emotional and behavioural adjustment. One reason for the lack of attention to children's own thinking about their relationships may

be the conceptual overlap between cognitions related to the self and cognitions related to significant others. As discussed in Chapter Five, many early and contemporary theorists have discussed the connection between 'self' and 'other' related cognitions. In recent years, this interrelationship is most distinctly discussed in the attachment literature. As mentioned earlier, Bowlby discussed the topic of 'self' in terms of its interconnectedness with the working model(s) of the attachment figure(s) (Bowlby, 1969/1980). More recently Main, Kaplan and Cassidy (1985) have discussed this overlap. They argue that because the internal working models of self and attachment figures are constructed out of dyadic experience, they may at first be closely intertwined and that in early development it may be preferable to speak of an internal working model of relationship. Further, they contend that even when the models of self and other have become distinct, they represent obverse aspects of the same relationship and cannot be understood without reference to each other. Drawing on the attachment literature, Sroufe and Fleeson (1988) have made a similar argument. According to them, "models of self, other, and relationships are constructed from relationship experiences, powerfully influence ongoing selection of social experiences...; expectations concerning the availability, responsiveness, and attitudes of others; and the complementary expectations concerning the self in relationships" (Sroufe & Fleeson, 1988, p.29).

Currently, most instruments designed to measure the view of the self consist of items related to a child's view of his family relationships and peer relationships. Arguably, if a child feels he has a good relationship with his mother, teacher, peer or any other significant person in his life, it should have something to do with how he thinks and feels about himself. Therefore, it seems appropriate to treat the view of relationship

with significant others as a part of the self- if feeling competent is a part of the self, so may be feeling loved. Contrary to this view, however, Harter & Pike (1984) contend:

> "perceptions concerning the degree to which one has friends or obtains support from parents or teachers do not necessarily imply judgements about the adequacy of the self. For example, one may conclude that something about the self is responsible for one's lack of friends. On the other hand, the cause may reside in certain characteristics of one's peers; that is they are not nice or are not friendly. Similarly, lack of parental support might be because one perceives the self as unlovable, yet, on the other hand, one may perceive one's parents as unloving" (p. 1971).

Thus, there exists a theoretical framework within which children's view of their social relationships may be expected to be different from their view of themselves, as well as for the expectation that these may be highly interrelated. Whether, the view of social relationships is an element of the self or not, it is important to understand how children think about themselves and their social relationships, and how these social cognitions are related with their behaviour. Taking a more pragmatic, rather than theoretical approach, it was decided to empirically explore these interconnections and the way they are related with children's emotional and behavioural problems.

6.2.1 Existing instruments for assessing children's view of their relationships with mothers, teachers and peers.

Currently, very few instruments are available for assessing young children's views of their social relationships, though as described earlier most self-concept or self-esteem measures include some items on the view of relationships. Recently, Furman and Buhrmester (1985) designed a self-report inventory (Network of Relationships Inventory, NRI) to assess how children perceive their social relationships. It consists of 30 questions which may be asked in relation to mother, father, teacher or best

friends. The child is asked to answer questions such as 'how much free time do you spend with this person (mother, if mother relationship is being measured)? How much time do you play with this person? and the answers are taken on a five-point scale. This inventory is designed for older children (11-13 years). The scale has an internal consistency of 0.80. No other information on its reliability and validity is available. Tarnowski, Holden and Ronald (1986) designed a 21-item self-report measure to assess peer relationships. It focuses on evaluating the number of friends, difficulties a child may have in initiation and maintenance of peer relations, the frequency of receipt of positive and negative consequences mediated by peers, withdrawal submission difficulties and the presence of antagonistic responding. However, it is a new measure and has been used only on 31 unselected 6-8 year old children attending an outpatient clinic, though it was found to show good internal consistency (Cronbach alpha = 0.88). The test-retest reliability over a four week period was 0.73 using Pearson's product-moment correlations. Validity was assessed by administering the same measure to parents of the children. Significant differences were revealed. No other information on validity is available. Although the authors claim this instrument to measure the above domains of peer relationships, no empirical evidence is available. Wheeler and Ladd (1982) have also developed a questionnaire on some components of peer interaction but it is largely meant to assess the child's self-efficacy in peer interaction situations. For example the child is asked, 'Some kids want to play a game. Asking them if you can play is --- for you'. The answers are taken on a four point scale ranging from very hard to very easy.

Another very recent measure- the Incomplete Stories With Doll Families has been developed by Cassidy (1987; 1988) within the attachment paradigm for 6 year old children. In her attempt to explore the interconnection between self-esteem and mental

representation of the self in relationship with the mother, Cassidy designed this task in which the child is presented with six story situations from everyday life experiences and is prompted to complete them using a doll family. For example, a child is asked to complete a story in which a doll protagonist brings a present for the mother, or is apologising to the mother, or is in need of help due some unexpected problems. The contents of the stories made by the children are scored on a five point scale indicating whether a child has a positive view of his relationship with the mother or negative. Among the existing measures of how young children view their relationships, this task came closest to the aims of the present study. The aim here was to explore children's social cognitions including how they think about their relationships with their mothers in their everyday life. Considering that this measure provided a child with the opportunity to express his relationship with his mother in situations relevant to everyday life, this measure was used in the present study. Its semi-projective nature and suitability to the age of children in the present study were additional factors which influenced the choice of this measure. The measure, although new seemed promising and its use in the present study was considered to provide evidence for its reliability, validity and usefulness. In line with the aims of the present study, additional story situations were designed to asssess children's view of their relationship with their teachers and peers on similar lines to the mother related stories. The details of the original task and additional dimensions are described in Chapter Seven.

To summarise, (i) the Pictorial Scale of Perceived Competence and Social Acceptance (Harter & Pike, 1984), (ii) the Puppet Interview (Cassidy, 1987; 1988) and (iii) the Incomplete Doll Stories task (Cassidy, 1987; 1988) were selected for use in the present study. The next chapter describes these measures in detail.

CHAPTER SEVEN

Adapting Instruments For Exploring Social Cognitions For Use In The Present Research

Three instruments were used to explore the selected children's social cognitions : the Pictorial Scale Of Perceived Competence And Social Acceptance For Young Children (Harter and Pike, 1984), subsequently referred to as the Harter Scale; the Incomplete Doll Stories (Cassidy, 1987; 1988); and the Puppet Interview (Cassidy, 1987; 1988). In addition, a standard measure of the children's verbal ability was obtained using the verbal scales of the Indian Scale Of Intelligence for children (Malin, 1970).

The instruments used for exploring the children's social cognitions had not been used in India previously, and were therefore adapted for use in this study. In the following, the original instruments, the recommended procedure for administering and scoring them, and the alterations made to suit them to the needs of the present study are described. As discussed in Chapter Six, a teacher acceptance subscale was added to the Harter Scales. The Incomplete Doll Stories Task which included only mother related stories was also extended by including peer and teacher related stories. The addition of the new domains to the original tasks together with the piloting of all the instruments and the training of interviewers who administered these instruments are also described.

7.1 The Pictorial Scale of Perceived Competence and Social Acceptance for young children

7.1.1 General description

The Harter Scale (Harter and Pike, 1984) is a self-report instrument which was designed to assess the children's view of their own competence and social acceptance. The competence domain is divided into two subscales, cognitive competence and physical competence. The social acceptance aspect is divided into peer acceptance and maternal acceptance. The scale has a pictorial format. There are six items in each of the four subscales. Each item is illustrated on a separate picture plate and shows a pair of children doing the activity relevant to the content of the item. The picture plates are bound in the form of an album. There are separate picture albums for boys and girls. Two versions of this instrument are available, one for preschoolers, and the other for the first and second graders. The latter was used in this study.

The items are scored from one to four. Higher scores reflect a more positive view of the child's own competence and social acceptance. Using Cronbach's alpha, Harter and Pike (1984) found each subscale to be internally consistent. The alpha values for competence and acceptance domains for first graders were 0.75 and 0.84 respectively (0.52 to 0.89 for all groups tested from preschoolers to second graders). Intercorrelations among subscales ranged from 0.50 to 0.66 for the first graders (.00 to .80 for all age groups). The mean scores for subscales ranged from 2.8 (S.D.=0.56) to 3.4 (S.D.=0.37) for first graders. The test- retest reliabilities for the pictorial scales are not available but those for the counterparts of the scale meant for older age groups, were found to be 0.69 to 0.80 over a three month period (Harter, 1982).

The construct validity of the scale was determined by conducting a factor analyses using oblique rotations. Two discriminable factors were obtained. All items in the two subscales of the competence domain were found to load on one factor and those in the social acceptance domain loaded on the other factor. Although the factor analyses supported two subscales, Harter and Pike (1984) recommend using them as four subscales on an a priori basis. Since there are no equivalent measures, convergent validity for the scale is not available at present. However, correlations of 0.30 to 0.37 respectively, were found between the teachers' reports for children and the children's own reports of their cognitive and physical competence respectively (Harter & Pike, 1984). The face validity of children's reports of perceived cognitive competence was established by asking children to give reasons for their responses. Harter and Pike (1984) reported that 96% of the 91 first and second grade children readily gave reasons for their answers. Since the scale is in the early stages of development and use, further information on its reliability and validity has yet to come.

7.1.2 Recommended procedure for administering the Harter scale

The scale is administered individually to children. To begin with, the child is given a sample item and instructed as follows (the instructions given here are for girls),

"I have something here that's kind of like a picture game and it's called WHICH GIRL IS THE MOST LIKE ME. I'm going to tell you about what each of the girls in the picture is doing. And then I want you to tell me which of these girls is the most like (Child's name)".

The interviewer then describes the pair of pictures in the sample item to the child and lets the child choose one from the pair of pictures. After the child has made her choice, the examiner gives her a chance to refine the choice by reading out the key qualifying descriptors that go with the item. After the child has been introduced to the scale, the interviewer then presents each picture in the scale and continues asking the child to first make a choice between the pair of pictures on each plate and further refine the choice by choosing from the two further alternatives with each picture, as appropriate. There are different sized circles under each picture which the child can point to for showing her choice. An example follows :

Figure 5 shows Item No 8 from the Harter scale. The interviewer would point to the picture on the left and say,

" This girl's mom takes her to a lot of places she likes to go" and for the picture on the right, the interviewer will say, " this girl's mom doesn't take her to very many places she likes to go". The child is then asked, " I want you to tell me which of these girls is the most like you?" If the child points to the picture on the left, the interviewer says, "Does your mom take you : a whole lot of places you like to go OR pretty many places". And lets the child choose between the two circles. The interviewer always starts from the extreme (larger) circle.

The album of picture plates is constructed so that, as the picture for a given item is presented to the child, the item description to be read by the interviewer, sitting opposite, is printed on the back of the preceding picture. The interviewer scores the child's responses on a separate sheet of paper as the child points to the circles in the pictures.

IMAGE REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

7.1.3 Translation and modifications of the Harter Scale

Since the scale is pictorial, its pictures were redrawn for use in India. Exactly the same sized, similarly styled pictures with Indian features and attire were drawn by an artist in black and white and were photocopied on coloured sheets with permission from Dr. Susan Harter (letter dated November, 1989). The revised pictures for Item 8 is shown in Figure 6 (see Figure 5 for comparison with its original sketch). The complete set of the redrawn pictures is given in Appendix 7.

The contents of the scale were translated into Panjabi and translated back into English to confirm the correspondence of the meanings, which were found acceptable. The contents and or the background drawing in the pictures for five items were modified to suit their use in India. These are described below

Item No. 1. The child is good at 'numbers' was changed to good at 'tables', because the emphasis in the first year of school in India is on learning tables and not numbers. Accordingly the picture for this item was modified. The revised sketch showed tables written on the child's note book instead of the numbers in the original scale.

Item No. 4. The child's mom 'lets go for dinner' was changed to 'lets go and play'. The concept of 'going to play' was considered more familiar for 6-7 year old children in India. No change in the picture was necessary.

Item No. 9. No change in the content of the item was necessary but the background of the picture was changed. The child in the original picture was sitting and reading

IMAGE REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

on the sofa but was sitting on a cot in the modified picture. The change reflected a more common practice in India.

Item No. 16. The child's mom 'reads stories' was changed to 'tells stories', because all mothers cannot read. The picture was modified accordingly.

Item No. 22. No change in the content of the item. The background changed from 'an auditorium to a classroom, again to reflect a concept more familiar to 6- 7 year old Indian children.

All the above changes were discussed with a colleague from the Department of Child Development, Panjab Agricultural University, Ludhiana (India).

The translated and modified content of the items was written at the back of the picture plates as in the original version of the scale. The pictures were arranged in the same order as the original scale.

In addition to the standard instructions recommended by Harter and Pike (1984), the children in this study were given an additional instruction, which was that their responses were not going to be 'marked' and that this was not a test. This was to guard against any concerns children might have about being evaluated. This instruction was considered important because of the high emphasis on marks and examinations in the Indian school education system.

7.1.4 Addition of a teacher acceptance subscale to Harter scale

A pictorial teacher acceptance subscale was added to the social acceptance domain by present investigator of the Harter Scale. It included six items, designed in the same form as the Harter Scale. The sketches for the subscale were drawn by the same artist who resketched the pictures of the Harter scale. The pictures and the content of the items are shown in Figures 7 (a to f), in a size reduced to 64%. They were inserted into the Harter Scale as items- 5, 10, 15, 20, 25 and 30. As in the original Harter scale, the item contents shown in the figures here were written at the back of the preceding pictures.

All picture plates (24 original but resketched and six new) were then bound into one album. The contents of the items for the modified Harter Scales are given in Appendix 7 alongwith sketches.

7.2 Incomplete Stories With Doll Families

7.2.1 General description

The Incomplete Stories With Doll Families Task (Cassidy, 1988; 1987) is a semi-projective task designed to measure children's view of their relationships with their mothers. It includes six incomplete stories which the children complete using a doll protagonist. The aim of the task is to find out how a child thinks about his relationship with his mother within the hypothetical situations presented to him.

Two of the six incomplete themes- described later in this section- (the present and the sorry stories) include potentially emotionally charged and relationship acknowledging

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interactions between the child and mother. Another two (the nothing for dinner story and the unhappy and mad stories) deal with conflict within the family and the last two (the noise in the dark and the doll/ bike stolen stories) dealt with a threat from outside the family. The stories are video recorded, transcribed verbatim and scored on a five point scale. The higher scores indicate a more positive view of the relationship.

Cassidy (1987; 1988) reported an inter-rater agreement in scoring within one- point on a five point scale across stories, to average 92 percent and conferenced the disagreements. The test-retest reliability using one story over a period of one month was found to be 0.63, ($p < .001$). The mean scores for individual stories ranged between 2.7 to 2.9 (S.Ds = 1.1 to 1.3). The internal consistency across all stories using Cronbach's alpha was found to be 0.78 (Cassidy, 1988). Cassidy developed this measure within the attachment paradigm and she therefore designed an additional qualitative three point classificatory system, to code the stories for whether a child views his relationship with his mother as secure, hostile or avoidant. She reported a significant but low association between the attachment reunion classification system and this measure (Cassidy, 1988). She also found a correlation of 0.22 ($p < .10$) with the maternal acceptance subscale of the Harter Scales (Harter and Pike, 1984).

7.2.2 Cassidy's recommended procedure for administering the Stories Task

Setting: A mother, a father, a boy and a girl dolls are placed in a row next to the doll house. The child sits close by, facing the arrangement and the interviewer sits on the child's left.

Instructions: The interviewer points to the dolls and says, "this is where this family lives". The interviewer then introduces the dolls saying, "this is mommy", etc and then questions the child saying, "which doll is the most like you?" After the child has made a choice, the interviewer explains to the child, " we are going to play a game with these dolls and the doll house. I am interested in finding out what kind of stories children tell. The way this game works is that I tell you the beginning of a story, and then I want you to tell the rest. I'll say a little bit, and then ask, " what happens next?" and then you can tell me what you think. The story you make up can be any kind of story you want it to be. It can be a happy story, or a sad story, or a scary story or a mad story, or a silly story. It can be a true story or a make- believe story, one that really happened to you or could never, ever happen to you. It can be whatever kind of story you want it to be. There is no right answer and there is no wrong answer. It's just what you want it to be. Do you understand? O.K. Here is the first story". The interviewer then continues with the stories one by one in the order in which they are described below. Each theme is followed by 'prompts' to encourage the child to make a story around the given theme. These 'prompts' are also given with each story.

7.2.3 Incomplete story themes

1. The Present Story : The boy (girl for girl subjects) makes a present at school for his mother. He brings it home and gives it to her. The child is asked to make a story about what the present was and what his mother does/ says when he gives it to her.

Later Prompts: What did the present look like ? Did the mother tell him how it could be better, or did she like it the way it was? What did the mother do with it? How did this make the boy feel? Was it pretty or not so pretty? How did this make the mother feel?

2. The Sorry Story : The mother is sitting at the dining room table. The little boy comes up to his mother and says, "I'm sorry mom". The child is asked to make a story about what happened to make the boy say that, and what the mother does after he says it.

Later Prompts: Was it his fault? Does he feel that if he'd been a good boy, it wouldn't have happened ? How did the mother feel? Did it ever happen again? Did she stop loving or did she love him any way?

3. The Unhappy and Mad Story : The boy is sitting in the living room. Today the boy is unhappy and mad. He knows that he has to do the one thing he hates most to do. Tell me what it is and what happens?

Later Prompts: What happens next? How does the boy feel then? Is there anybody who can help him with his problems? Who ? What does mom do? How does mom feel? Did she stop loving him or did she love him anyway?

4. The Bike/ Doll Stolen Story : The boy has a bike (doll for girls) that he keeps in his front yard that his mommy and daddy had given him for his birthday. One day he goes outside and he sees a strange boy, a boy he has never seen before, riding off down the street on his bicycle. Some body is stealing his bike. What happens?

Later Prompts: Was it the boy's fault that the bike (doll for girls) got stolen? Does he feel that if he'd been a good boy it wouldn't have happened? Does he get the bike back? How did he feel before he got it back? How does he feel after he got it back? What would he have done if he couldn't get it back? If there is no mention of the mother, ask " would it have been better if he'd gone to mom?"

5. The Nothing For Dinner Story : This is dinner time. The boy doesn't like anything they have to eat. You finish the story.

Later Prompts: What happens next? How does the boy feel? If there is anybody who can help him with his problem? Who? What does the mom do? How does the mom feel? Does the mom stop loving him or does she love him anyway?

6. The Noise In the Dark Story : It's in the middle of the night and every one is asleep. The little boy's sister has gone away to spend the night with a friend, so the little boy is all alone in his room. All of a sudden there's a lot of loud noise. The boy wakes up. it's very dark. What happens next?

Later Prompts: How does the boy feel? Is there anybody who can protect him? Who? What do you think the noise was? What does the mom do? Does anybody get hurt? What would he have done if he couldn't get it back? If there is no mention of the mother, ask " would it have been better if he'd gone to mom?"

The later probes depend upon the child's responses. Each story lasts about 2-3 minutes. It may be noted that only two (the present and sorry stories) have the mother in the scene originally and the other four stories bring the mother in to the scene only in the later prompts.

7.2.4 Translation and modification of the Stories Task

Four of the original six incomplete story themes- the present story, the sorry story, the noise in the dark and the doll/bike stolen were adapted for use in the present study. The themes were retained as in the original but modifications were made in the contexts in which the themes were presented, to suit them to the Indian situation. The

texts of the stories were translated into Panjabi before use. The following changes were made in the themes.

1. The Present Story : Instead of making the present at school, the theme was modified to say that the child buys a present for the mother from his pocket money. Since children in India (Ludhiana) generally do not have a present making sort of activity at school, this change was considered important. The practice of getting pocket money is common and children are generally familiar with the concept.

2. The Sorry Story : Instead of sitting at the dining room table, the mother in the modified theme was sitting in the court yard. This change was made with the view that all children may not come from homes with dining room tables, whereas the practice of sitting in the court yard in free time is common.

3. The Noise In The Dark Story : Instead of having gone to spend the night with a friend, the sister (or the brother for girls) in the modified version was away to visit the maternal grand mother. This change was also made with the view that going to visit the grand mother would be more familiar to the children.

4. The Doll/Bike Stolen Story : Retained as such.

As described earlier, of the six original themes, two themes directly presented the mother in the situation (the present and the sorry stories) but the remaining four (mad and unhappy, nothing for dinner, doll/bike stolen & noise in the dark) did not. In this Study, two stories where the mother is directly presented in the situation, and two where the mother is not first presented but is brought in during the later prompts, were

retained. Thus, two stories 'the nothing for dinner' and 'the unhappy and mad' stories were excluded. The ones retained were considered more appropriate in the Indian setting. Another reason for dropping two of the stories was the consideration of the time needed to administer the tests in the present study. No changes were made in the later prompts that follow the stories' themes, and to the procedure for administering the Task.

7.2.5 Cassidy's (1987) recommended scoring system for the Stories Task

Cassidy's recommended scoring system follows a five point scale (1-5) in which higher score depicts a more positive view of the relationship with the mother. Each story has a separate scoring system which allows for the content of the children's stories to be evaluated according to the theme of the story. The scoring system for one of the stories (Cassidy, 1987) is given below, as an example. The scoring system for the remaining stories is given in Appendix 8.

7.2.5.1 Recommended scoring system for the Present Story (mother related)

Score 5- This score is quite rare. The child's report of the mother-child interaction is the same as for a score of four. But here, there is something particularly nice and special about the present. It is described as beautiful, it is shiny gold or full of diamonds, etc. Hearts are not scored here, and in fact are viewed with suspicion (that is, they may very well be scored much lower).

Score 4- The child spontaneously, initially states that the interaction is a positive, supportive one. The child gives the mother a pretty or special present, which the mother accepts with a spontaneous display of gratitude or affection. Both the child and

his gift are accepted and valued. She thanks the child and mother feels good about the interaction.

Score 3- Only when the child is asked does he say that the mother- child interaction is positive. Yet the child was able to give a pretty or special present, and there is nothing negative about the story.

Score 2- Even when asked, the child never mentions the mother's demonstrating gratitude or pleasure in relation to the child and the present. There is no mention of feelings, but when asked, these children may respond that both the mother and child feel happy.

Score 1- The presents in stories coded here are either described as worthless and or hostile, or the mother rejects them by throwing them away, wishing they were better, etc.

7.2.6 Difficulties In following Cassidy's Scoring System For Incomplete Doll Stories Task

After the task had been administered in Study Three, some difficulties were encountered in the use of the original scoring system. The system was therefore, revised. The difficulties encountered and the revised system of scoring the present story are given below. The revised system for the remaining mother related stories is given in Appendix 8.

The main problem encountered in following Cassidy's original system was that the definition of the middle point - a score of '3' tended to vary from story to story. For instance in *the 'present' story*, Cassidy assigned a score of three if,

" Only when the child is asked, does he say that the mother- child interaction is positive. Yet the child was able to give a pretty or a special present, and there is nothing negative about the story" (1987, p 195).

Whereas in *the 'noise in the dark' story*, a score of three was given when the stories were "mid range", i.e.,

"if there is an equal balance of acceptance and support on the one hand, and rejection, avoidance, or bizarreness on the other. The child goes to the parents and they try unsuccessfully to comfort him. The child investigates a non-stressful situation and later freely tells the parents about it. There isn't much data about the mother". (see Appendix 8 for complete scoring system given by Cassidy, 1987).

Similarly her definition for assigning of a score of 'two' varies across stories. For example, in the present story, a score of two is given if,

"... when asked these children may respond that both the mother and child feel happy". But in case of the 'noise in the dark story', a score of two may be given if ..." the mother is not actively helpful or... does something negative or bizarre".

In addition to the problems with the varying definitions of scores, the words like 'bizarreness' were found difficult to operationalise from the responses provided by the

children in this study. Also Cassidy did not provide reasons for the negative scoring of some statements. For example, in 'the present story's scoring system, she stated " hearts are not scored as 'five' and are in fact viewed with suspicion" (1987, p 195). She neither described what was meant by the statement nor gave any reasons for viewing 'hearts' with suspicion.

Further, in the system for scoring the sorry story, Cassidy gave three general hints saying, "the following points should be kept in mind, what happened that leads to the apology, is it personal or impersonal? What did the mother do? How personal, how forgiving?" (Cassidy, 1987, p.197). However, she did not explain how these hints had to be used while scoring.

Therefore, to remove the ambiguities in the existing scoring system for the mother related stories, to make the scaling uniform across all the stories and to suit it to the responses of the children in the present study, the scoring system was re-written. The top and the bottom ends of the scoring continuum essentially have the same format as Cassidy's original system. The same language was also retained where ever possible but the revised scoring system, represents a five point scale, where five denotes very positive, four denotes positive, three denotes mixed, two denotes negative and one denotes very negative. The definitions for each of these points (one to five) were worked out for all the stories separately. The examples to illustrate 'very positive' to 'very negative in each story were taken from 30 randomly selected transcripts.

The revised system for the present story is given below for the sake of an example (see Appendix 8 for scoring system of remaining mother related stories)

7.2.7 Revised system to score the Present Story :

Score 5: if the child spontaneously presented a positive picture of the interaction by saying things like, the mother accepted the present happily, she thanked the child with a smile or demonstrated her appreciation by hugging or kissing the child, she found the present beautiful and used it instantly or said she liked it very much/ praised it. Both the child and the mother felt good about it. (All these things need not be present in a single story, but a story scored as five, surely begins with a spontaneous positive remark by the child to indicate the mother's reaction and is expressive about the beauty of the present or praise of the act or gratitude).

Score 4: if the child presents a positive picture of the relationship but on persuasion or suggestion, the child is scored four. The child may not be very elaborate about the beauty of the present or the mother's reaction but every thing he says is clearly positive.

Score 3: if the child presents a mixed picture of the relationship by saying something positive as well as negative. For instance, if the mother accepts the present but scolds the child for bringing it.

Score 2: if the child presents a mildly negative picture of the mother's reaction. For instance, if the mother puts the present aside or does not like it or if the child even on persuasion says that the mother did not say anything.

Score 1: if the child presents a spontaneously negative picture of the relationship. For instance, if the mother beats the child , tells him off and or asks him to return the gift, or if she rejects the gift or, say- there was no need to buy it.

7.3 Addition of Teacher and Peer related Incomplete Stories

Eight new incomplete story situations- four related to teachers and four related to peers, were designed along similar lines to Cassidy's mother related stories. The aim of these stories is to find out the extent to which the children view themselves as participating in positive relationships with their teachers and peers in the hypothetical interactive situations.

The four teacher related story themes reflected common occurrences in the Indian classroom setting. Two situations, one in which a child brings a flower for the teacher and another where a child suddenly falls sick in the classroom, were emotionally charged relationship- based interactions between the teacher and the child. The other two, one in which the child has not done the home work and in another in which he is expected to finish some class work, reflected the high focus on academic work in the Indian schools and provided a chance to assess the child's views of interaction and relationship with teachers in academically demanding situations.

The four peer related story themes added to this task were: a child arrives late to the playground while others have already started playing; the child wears new clothes and goes to play with other children; the child, while playing with another child far from home, gets hurt; and another child living close by is celebrating his birthday. These

themes reflected common situations from children's interactions with their peers and the aim was to find out if the children viewed their peers as helpful and supportive.

All peer and teacher related stories, like the mother related stories were scored on a five point rating scale, where higher scores indicated a more positive view of the relationships. The summed score of four stories in each domain provided a measure of the child's global view of the respective relationship.

The setting of the dolls in which the teacher and the peer related stories were administered and a photograph of the setting are given in Appendix 8. The instructions to be given to the children, the exact text of the stories and the procedure to score both teacher and peer related stories together with their Panjabi version are also included in Appendix 8.

7.4 The Puppet Interview

Another task used in the preset study was the Puppet Interview (Cassidy, 1988; 1987). This interview consists of 20 questions which are aimed at assessing a child's global self-esteem. The main focus in this interview is on measuring 'the perfections of self' claimed by the child. The assumption is that children who have a positive view of themselves are able to admit normal imperfections of the self and that they are able to explore both strong and weak points of the self. There are two versions of this interview. One involves asking the questions about himself directly to the child and in the other the child talks about the self through a large glove puppet, that is, the questions are asked from the puppet but the child answers on behalf of the puppet. The former version of the interview was used in this study but with the help of a

puppet. The puppet was simply used as means of making the situation non-threatening, friendly and playful for the children.

The questions and the procedure for administering the interview provided by Cassidy (1987) are given below. Note that the questions and procedures given by Cassidy and reproduced here are for the indirect version of the puppet interview. In Cassidy's study the direct version was based on this indirect one. In the present study, the direct version was used.

7.4.1 Questions in the Puppet Interview

1. Bix, do you like (the child's name)?
2. Bix, do you like ( ) the way he is or do you want to make him better? How?
3. Bix, I want to know, is ( ) a good boy?
4. Bix, What's good about him?
5. Well Bix, What's the very best thing about him?
6. Are you ever disappointed in ( )(If No, say,"Never"?).
7. Is ( ) perfect? (If "yes", say, "Totally,in every way"?).
8. Bix, do you like to play with ( )?
9. Tell me Bix, do you want ( ) to be your friend?
10. Bix, can ( ) do lots of things? Does he do things well or not so well?
11. Bix do you think ( ) is nice looking?
12. Bix, is ( ) ever a bad boy? (If no, "Never" ?).
13. What's the worst thing about him? (If nothing, "Nothing"?).
14. Bix, do other people like ( )? Who? (After first pause, "any body, else?").
15. Is there anything at all that could be better? (If no, say "nothing"?).
16. Do you think ( ) usually does the right thing. If "yes"- usually does the right thing? How about always?
17. Do you think ( ) is important or not so important? Why?

18. Do you care what happens to ( )?

19. What do you hope happens to ( )?

20. What do you think ( ) will be when he grows up?

7.4.2 Cassidy's Procedure For administering the Puppet Interview

The interviewer introduces Bix to the child, and demonstrates how Bix works. After a minute or two of familarisation and free play with Bix, the interviewer says,

" I want to play a game. I want to ask Bix some questions about you. I will ask Bix some questions and Bix can answer. You can talk for Bix. For instance...." (Here the interviewer has a brief playful interchange with Bix to accustom the child to playing the role of Bix). The interviewer continues, " there is no wrong or right answer. It can be whatever you think Bix really thinks".

After this point, the interviewer looks directly at Bix rather than at the child, and interviews Bix.

The interviews are video recorded. The child's responses are taken down in a questionnaire format from the recording and coded according to Cassidy's (1987) procedure, given later in this chapter.

7.4.3 Translation and modification of the Puppet Interview.

Like the other measures used in the study, the questions of the Puppet Interview were translated into Punjabi. However, questions number 6, 17 and 18 could not be

translated, either because the meaning of the translated version did not correspond with the original or because the corresponding Punjabi terms were not used very frequently with children and were therefore considered inappropriate for use in the task. The description below clarifies these points.

Question 6- Are you ever disappointed in (child's name)? The term 'disappointed' corresponds with the Punjabi term "Nirash" and has a corresponding meaning but the term "Nirash" is not likely to be used frequently with children in the first year of primary schools in Ludhiana, India.

Question 17 - 'do you think the child (name) is important or not important ?', when translated back into English meant 'do you think the child is famous or not famous?' or 'do you think child is necessary or not necessary?' Its meaning did not correspond to the original question and it could not be translated in a manner that would imply the same meaning as the English version of the question. It was therefore excluded.

Question 18- 'do you care what happens to the child?' was found too ambiguous for children in its translated form.

These three questions were therefore excluded from the Interview used in the present study. The list of translated questions used in this study is given in Appendix 9.

An elephant puppet was used to interview boys and a duck to interview girls in this study, instead of the frog puppet used by Cassidy (1987). The puppet characters were changed because 'frog' is not a popular animal with children in India, whereas an elephant and duck are famous characters from children's poems and stories. Both the

puppets were home made (see Appendix 9 for a photograph of the puppets used in this study). The reason for choosing different puppets for boys and girls was that an elephant is usually addressed as a male character in Punjabi language, whereas a duck is addressed as a female character.

The way of asking the questions was altered to suit the use of the puppet in this study. Since the puppet here was used to ask questions, instead of saying, "Bix, is (child's name) a good boy", the interviewer in this study said, " Elephant wants to know, is (child's name) a good boy" ? The interviews in this study were audio tape recorded instead of video recorded.

7.4.4 Scoring system for the Puppet Interview

The responses to the Puppet Interview, like the stories are scored on a five point rating scale. As with the scoring of the Incomplete Doll Stories Task, some problems were encountered in the use of the recommended system for the present study. The system was therefore revised. The recommended system, the difficulties encountered in its use, and the revised system used in the present research are given below. As mentioned in the Stories Task, the revisions in the scoring system were made after the task had been administered but are described here for the sake of brevity.

7.4.4.1 Cassidy's recommended system for scoring the Puppet Interview

Score 5 is given, if children say nothing about being perfect. They freely admit the possibility of imperfections. On the other hand, there is nothing gratuitously negative in their responses. These children may freely describe the ways in which they are

Score 1: if the child is completely perfect about everything, even when pressed. If the only exception to the child's perfection is that he responds to the question "does the child always do the right thing? by saying "usually", the interview is coded here. In addition, the child may say something bad about himself. Depending on how bad this is, the child is classified either as perfect or negative. If the child is perfect except he wishes he were better, this is coded here as perfect.

Also Score 1, if the child says a seriously negative thing about the self, or more than two small ones. Included here are statements which belittle or mock self, see the child as ugly, describe the child as not a good child, say there is nothing good about the child, see the child as someone to laugh at excessively. Bix says he doesn't like the child. the child says he's not important in the context of some other negative thing. Score 1 is also given if the child says he's "not important", plus there is an additional small negative statement or two or more perfects.

Like the Incomplete Doll Stories Task, Cassidy designed this task within the attachment paradigm. Therefore, she also had an additional categorical classificatory system to categorise the children's responses into three categories- perfect, open and negative.

7.4.4.2 Difficulties Encountered In Following Cassidy's Scoring System And The Revised System For Scoring the Puppet Interview

The number of claims made to perfection of the self was central in scoring the Puppet Interview. (A claim to perfection of the self in the Puppet Interview referred to a child not admitting any flaws in himself. For example, when asked "is 'child' ever a bad

boy?" the child insists that he is not). The scoring system described above illustrates that, to be able to score five, a child had to make no claims to perfection of the self. Similarly, to score one, the child had to claim perfection in all the opportunities offered to him. In the present study there was no child who did not make any claims to perfection or who claimed total perfection of the self in the Puppet Interview.

Further, it may be noted that scoring involves several subjective judgements. For example in score 4 above, along with the criteria for this point, it is stated, give a score of 4 ..."if there is some other reason to give this higher score". No explanation or examples are given in the original report to make such judgements.

Cassidy also seems to differentiate between "gratuitously negative" and "minor negative" without giving any illustrations for what must be considered gratuitously negative or minor negative.

Since the number of claims to perfection of the self was central in the scoring procedure, it was decided simply to count the number of perfections claimed by a child and discard all other criteria for the purpose of the present study. The number of perfections claimed by a child was therefore considered as a child's score obtained in the Puppet Interview. Question numbers 2, 3, 4, 5, 7, 12, 13, 14, 15 and 16 in the Puppet Interview were relevant for this purpose. As suggested by Cassidy in the original procedure, a score of half was counted whenever a child said, "I don't know" to a question which had the scope to admit a weakness or a negative aspect of self. It may be noted that in the original system a higher score on the puppet interview denoted a positive view of the self but with the revised system, a higher score depicted a lower or relatively negative view of the self.

7.5 Intelligence Scale For Indian Children

The social cognition tasks being used in the present study, especially, the Incomplete Dolls Stories Task and the Puppet Interview (Cassidy, 1987; 1988) involved verbal responses from the child. In order to obtain a standardised measure of children's verbal ability, the verbal scale of Malin's Intelligence Scale for Indian Children (MISIC; Malin, 1970) was administered to the samples. When analysing the responses of the children to the Harter and Cassidy measures, the IQ derived from the MISIC was used as a covariate.

The MISIC is an Indian adaptation of Wechsler's Intelligence Scale For Children. It consists of 11 subtests designed to assess the verbal (6 subtests) and performance (5 subtests) intelligence of six to 16 year old children. The original test consists of 12 subtests, but one, the picture arrangement, was excluded by the authors as culturally biased. The authors recommend that four subtests in each area may be used to obtain a reliable measure of children's verbal or performance IQ. In this study, the information, general comprehension, arithmetic and vocabulary subtests from the verbal aspect were used.

Malin (1970) standardised the MISIC on 90 school going children at each age level including boys and girls in 20 : 30 ratio. The concurrent validity of the test with school rankings was found to be 0.61. The congruences with the California Test of Mental Maturity for 8- 16 year old and Goodenough Draw- a- Man Test for younger children were found to be 0.63 Malin, 1970). A test- retest reliability using Pearson's Correlation was found to be 0.91 (Malin, 1970).

7.6 Piloting of the Instruments and training

This section describes the piloting of the instruments used in the study and the training of the interviewers who were involved in administering these instruments.

7.6.1 Piloting of the Instruments

After the Harter Scales, the Puppet Interview and Incomplete Doll Stories Tasks had been modified and adapted, they were administered to five 5-7 year old children individually before using them with the sample of the main study. Since some tasks to be used in the study were new and others were being used in India for the first time, the purpose of this pilot work was to ascertain that the questions and situations involved in the measures were clear to the children. Another aim was to gain some practice in using these measures.

The pilot work indicated that the children enjoyed the measures and were able to respond with ease. As described later in the procedure for collecting data, the children's responses to the Incomplete Stories Task and the Puppet Interview were tape recorded using a Walkman recorder. One of the children in the pilot study was not familiar with that type of recorder. All of them were very curious about the recording and wanted to listen to their recordings. They also wanted to wear the glove puppet and to play with it. In the light of these findings it was decided to incorporate one or two minutes of play with the puppet and other play materials before beginning the testing session and to give each child the option of recording and listening to a brief poem or any dialogue and of replaying it to listen to the recording. The children also showed a tendency to 'nod' or 'shake their heads' for answering 'yes' or 'no'.

Based on this finding, it was decided to ask the children to verbalise their responses as far as possible. It was also decided that the interviewers would try and repeat the child's response by speaking it out, if the children answered in gestures. This was to enable the transcribing of the audio recorded responses at a later stage.

7.6.2 Training of Interviewers

Along with the writer (GS), three others (MJ, MK, MM) were involved in collecting data on children's social cognitions and IQ. Their background and training for conducting these interview sessions is described below. The aim of the training was to bring about uniformity in carrying out the procedures and to enable practice in the use of the measures.

MJ and MK were graduates with Child Development as a subject and MM had a Masters' degree in Science. Before starting the collection of the data in schools, all team members acquainted themselves with the testing materials and procedures and trained together to bring uniformity to the way of conducting the interviews. MJ and MK were involved in IQ testing only and MM in conducting the social cognition measures. The training of MJ and MK took place in an informal setting at home with children of approximately the same age as those who participated in the study. GS conducted the battery of scales of the IQ test to two children while MJ and MK watched. Then GS watched each one of them conduct one session each. All sessions were followed by discussions. On their own again they practiced conducting the tasks with at least three children each before the samples of the study were assessed. MM joined the research team after data collection was in progress. She listened to recordings of several interviews done by GS and interviewed three children at home of approximately the

same age as the subjects of the study. GS listened to the interviews recorded by MM followed by discussions. MM interviewed two more children at home for the sake of more practice and watched GS conduct an interview at home before she started the interviews with real subjects in schools.

The next chapter presents the aims, the method and the findings of the study (Study Three) in which these instruments were used.

CHAPTER EIGHT

STUDY THREE

The View Of Self And Of Relationships With Mothers, Teachers And Peers In Children With Emotional And Behavioural Problems

8.1 Aims And Hypotheses

The main aim of the study was to explore whether children with emotional and behavioural problems differ in the way they think about themselves and about their relationships with their mothers, teachers and peers. As discussed in chapter 7, one measure used for this purpose was the Pictorial Scale of Perceived Competence and Social Acceptance (Harter & Pike, 1984). Higher scores on this measure depict a more positive view of perceived competence and social acceptance. It was hypothesised that children with emotional and behavioural problems will score significantly lower than the non-problem children on this measure. A teacher acceptance subscale designed on similar lines to the other subscales in the Harter Scale was also used. Results on this new measure were expected to be similar to those from the Harter Scale. The second measure employed was the Incomplete Doll Stories Task (Cassidy, 1987; 1988). This measure assessed the children's view of their relationships with their mothers. Higher scores on this measure depict a more positive view of the relationship. It was hypothesised that children with emotional and behavioural problems would score lower on this measure depicting a relatively negative view of their relationships with their mothers, when compared with their non-problem counterparts. Incomplete Doll Stories, designed on similar lines to the mother related stories, were also used to assess the children's view of their relationships with their peers and teachers. As with the mother

related stories, it was hypothesised that the children with emotional and behavioural problems would score lower on the peer and teacher related stories showing a relatively negative view of their relationship with their peers and teachers.

The third task was the Puppet Interview (Cassidy, 1987; 1988). Unlike the other measures used in this study, a higher score in this interview measured a relatively negative view of the self. It was hypothesised that children with emotional and behavioural problems would score higher on this measure, indicating a relatively negative view of the self as compared with their non-problem peers.

Some children show a predominantly internalising type of emotional and behavioural problems, others show a mainly externalising type of emotional and behavioural problems and still others show a multiple problems including both an internalising and an externalising element. A second aim here was to explore whether and how subgroups of children showing predominantly internalising, externalising or multiple problems differed in the way they thought about themselves and their relationships with their mothers, teachers and peers.

This chapter describes the location, method and findings of the study.

8.2 Location and Time

The study was carried out in schools of Ludhiana City (India) in the third term of 1989-90 after the selection of children had been completed.

8.3 METHOD

8.3.1 Sample

This study was carried out on two groups of children, a target group (showing emotional and behavioural problems) and their matched comparison children. The criteria and method of their selection is described in Chapter Four. There were 115 children in the target group and 95 in the comparison group. Figure 8 shows the number of children in subgroups of externalising, internalising and multiple problems and their distribution according to gender. The mean age of the children in the target group was 78 months (S.D.= 7.2 months) and of those in the comparison group was 77.8 months (S.D.= 6.8 months).

8.3.2 Instruments

The instruments described in Chapter Seven were used for exploring children's social cognitions.

8.3.3 Procedure followed in exploring social cognitions

The social cognitions were explored in individual interviews with children in their respective schools with permission from their classteachers and headteachers. The need to seek permission from parents was also queried with the teachers but was not considered necessary. Appointments to interview children were made with their teachers during the time they were completing the PBCLs, assigning one day per class. The schools were requested to allocate a separate room for carrying out the

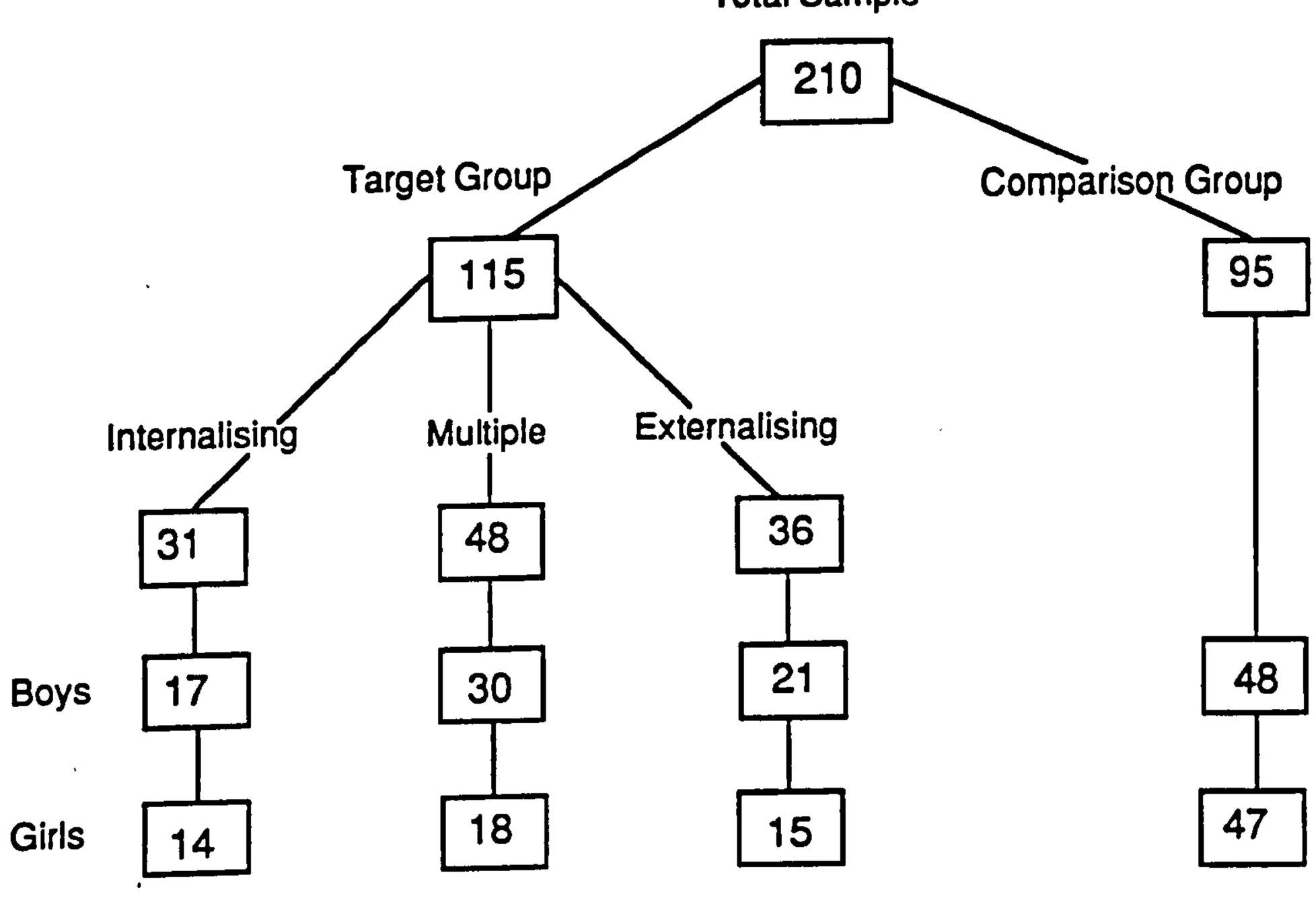

Figure 8: Distribution Of Sample According To Subgroups

interviews. Most schools gave their music rooms or prayer rooms and the children were familiar with the room environment.

On the morning of interview days in schools, after finalising the room arrangements and the children who were available to be interviewed, GS who was somewhat familiar with the children due to her initial visits to schools in the process of obtaining the behavioural reports for children, went to the classroom with another team member. She took the elephant glove puppet and a recorder with her and gave a brief introduction to the children using puppet play and saying that the elephant would be very pleased if some of them came and spoke to him in the "music (or whatever) room", and let the teacher choose the order of sending the children. Most children readily agreed to come with the researchers but help from the teachers was sought in the case of children who were somewhat reluctant to come with the researchers. As specified earlier, five children refused to come for the interviews and were dropped from the sample.

On the way to the interview room the children were told that there were other play materials and that we were going to make little stories. Before beginning the session, each child was given a brief introduction to the entire session. The dialogue was something like this, "we have got this picture book (Harter Scales) that we are going to show you and talk about, there are the dolls (pointed to the doll house) that we are going to make little stories about, and then there are some simple question- answer games (Intelligence test) and then the elephant wants to talk to you as well".

The children were told about the recording and assured that we were not going to let anybody else hear the stories they made, or whatever they said, not their teachers, not

the other children in the class and nobody in the school and everything was just for us to listen to and to find out what kind of stories children make. All the children were given the choice of recording a dialogue or a poem if they wanted to; some of them did and were pleased. This was followed by administering the measures, using the recommended procedure after the necessary modifications described in Chapter Seven for each of the measures. Each interview session with a child lasted for approximately one hour to 70 minutes. There were two parallel interview sessions in the same room on most occasions. All interviewers except GS were blind to the problem status of children.

8.3.4 The order of administering the instruments

The instruments were administered on children in the following order:

1. The Harter Scales
2. Mother related Incomplete Doll Stories
3. The Puppet Interview

   Break for 5 minutes

4. Teacher related Incomplete Doll Stories
5. Peer related Incomplete Doll Stories

   Optional Break for 5 minutes

6. Intelligence test

8.3.5 Procedure for recording the children's responses

The responses to the Harter Scales and the intelligence test were noted manually on a scoring sheet as recommended by the authors and the responses to the Stories Task and the Puppet Interview were tape recorded using a Sony 'walkman' Cassette-Corder (TCM-34V) and a microphone. Batteries (1.5 volts) were used to operate the recorders where the main power supply was unavailable.

8.3.6 Transcribing of the audio recorded responses

The responses for the Puppet Interviews and Doll Stories' Tasks were transcribed verbatim from the audio recordings. The recording for each child was about 30-35 minutes long. It took four to five hours to transcribe and recheck one interview with a child. There was background noise in most of the recordings. The dialogues were transcribed with the consensus of at least two people when ever there was confusion. All scripts were assigned codes to enable blindness to the identity of the children and the interviewers.

8.3.7 Scoring of the Incomplete Stories Task, the Puppet Interview, the Harter Scale and the MISIC

All transcripts were scored independently by the writer and SB, scoring one story at a time for each child, following the revised system of scoring (discussed in Chapter Seven). No other information was available to the raters about the child, at the time of scoring except the story being scored. Following Cassidy (1987) agreements within one point on a five point rating scale between the two raters were calculated and are given in Table 45. The average rate of agreement was 89.5% (uncorrected for chance)

for the mother related stories. This was comparable with the agreement rate of 92% reported by Cassidy (1988). The rates of agreement were similar for the peer and teacher related stories (89% and 91% respectively). The two point differences were conferenced. The Puppet Interview was scored by the writer.

The Harter Scale and the Intelligence test were scored using the recommended procedure of the authors. The results are given in the next section.

Table 45
Inter-rater Agreements For Scoring Of Incomplete Doll Stories Task

Story	Agreement
Mother Related	**89.5%**
Present Giving	95%
Sorry	95%
Bike Stolen	85%
Noise in the dark	83%
Peer Related	**88.8%**
Arrived Late	90%
New Dress	88%
Hurt Away from Home	90%
Birthday Party	87%
Teacher Related	**91%**
Bringing Flower	90%
Classwork	88%
Sick At School	95%

Cassidy (1988) reported 92% (76 to 100%) Agreement for mother related stories.

8.4 RESULTS

8.4.1 Introduction

This section presents results obtained from the Harter Scales, the Puppet Interview and the Incomplete Doll Stories Tasks. These measures were first analysed to examine gender differences in the scores. Then, the correlations of IQ scores with the scores on the other measures were seen. Next, the differences in the scores of children in the target group (those who presented emotional and behavioural problems) and the matched comparison group were observed. Finally, the follow up analyses were carried out to investigate the effect of types of problems (externalising, internalising, or multiple) presented by children on their scores in the various measures used in this study. The results from each of these measures are presented in the following order- the Harter scale, Incomplete Doll Stories and Puppet Interview. The intercorrelations among these measures are then given in the end. The preliminary findings indicated that the children with emotional and behavioural problems had a significantly lower IQ score in comparison with their non-problem peers (see Table 60, p. 309). Since one of the two interviewers was not blind to the children's problem status, the data from the social cognition measures was analysed to examine any possible bias in the findings. The results from the analyses of variance indicated that there were no significant differences in the pattern of findings for the two interviewers

8.4.2 THE HARTER SCALE

This measure was analysed as outlined by Harter and Pike (1984). Each of the subscales- cognitive competence, physical competence, maternal acceptance, peer

acceptance and teacher acceptance were examined separately. In addition, two summed scores were computed- a score derived by combining the cognitive and physical competence scales to form a competence score, and, a score derived by combining the peer, maternal and teacher subscales to form an acceptance score.

The descriptive statistics including mean score of each item in the revised Harter Scales and internal consistency for its subscales along with Harter and Pike's original findings (1984) for their first and second grade children are given in Table 46 and 47. The mean scores for the majority of the items are 3.00 or above in both the studies (It may be noted that a score of 3 and above shows a positive view of the child on the particular item). The internal consistency of the scales (Cronbach's Alpha) is also comparable in the two studies (see Table 47).

8.4.2.1 Effect of gender on Harter Scale scores

The results from one way analyses of variance carried out to examine gender differences indicated that the differences in mean score in both the competence and social acceptance domains were non-significant (see Table 48).

8.4.2.2 Correlation of scores in Harter Scales with IQ

Table 49 shows that the Pearson's correlation between IQ and the perceived competence scores was low but significant. In the social acceptance scales, the correlations were non-significant for maternal acceptance in both target and control groups. In the case of teacher acceptance, the correlations were non-significant in the target group and significant but low in the case of the comparison group. The correlation between IQ and peer acceptance for the comparison group children was higher than for the other scales, but was moderate (.40). The low to moderate correlations indicated that the Harter subscales were measuring a different construct than IQ and provided evidence for the discriminant validity of the scale.

Table 46

Item Means For Harter Scales In This Study And Those Found By Harter & Pike (1984)

Item	This study Mean (SD)	Harter & Pike Mean (SD)
N	210	104
Cognitive Competence		
Good at tables	3.08 (.79)	3.2 (.73)
Knows lots at school	3.23 (.70)	3.5 (.64)
Can read alone	3.28 (.69)	3.4 (.73)
Can write words	3.39 (.64)	3.6 (.58)
Good at spellings	3.28 (.73)	3.4 (.65)
Good at sums	3.30 (.70)	3.5 (.62)
Physical Competence		
Good at swinging	3.21 (.72)	3.7 (.60)
Good at climbing	3.35 (.68)	3.4 (.80)
Good at bouncing	3.28 (.70)	3.5 (.71)
Good at hoping	3.28 (.73)	3.7 (.63)
Good at running	3.31 (.68)	3.4 (.70)
Good at jumping rope	3.11 (.87)	3.1 (1.02)
Maternal Acceptance		
Mum lets go to play at friends place	3.06 (.79)	2.8 (.89)
Mum takes to visit places	3.15 (.76)	3.1 (.95)
Mum cooks favourite foods	3.22 (.73)	3.1 (.77)
Mum tells stories	3.07 (.86)	2.7 (1.13)
Mum lets stay over night	2.53 (1.03)	2.9 (1.01)
Mum talks to you	3.20 (.76)	3.0 (.94)
Teacher Acceptance		
Teacher praises	3.13 (.71)	-
Teacher answer queries	3.20 (.80)	-
Teacher calls for me to answer	3.21 (.77)	-
Teacher doesn't tell off	2.82 (.74)	-
Teacher shows affection	3.13 (.75)	-
Teacher gives stars on work	3.12 (.80)	-
Peer Acceptance		
Has lots of friends	2.96 (.90)	3.1 (.85)
Others share toys	3.11 (.87)	3.3 (.78)
Has friends to play games with	3.21 (.77)	3.0 (.90)
Has friends on ground	3.29 (.76)	3.2 (.89)
Gets asked to play	3.24 (.75)	3.1 (.85)
Others sit next to him	3.27 (.73)	3.1 (.81)

Harter & Pike figures are for their first and second grade samples

Table 47

Internal Consistency Of Harter Scales In This Study And In Harter & Pike[1] (1984)

Scale	Comparison	Target	(Harter & Pike, 1984)
N	95	115	65
1. Competence			
Cognitive	.84	.72	.71
Physical	.79	.74	.50
Combined	.89	.85	.75
2. Social Acceptance			
Maternal	.69	.71	.72
Teacher	.76	.69	-
Peers	.78	.66	.78
Combined	.89	.84	.84
3. Total	.94	.90	.87

[1]Harter & Pike figures are for their first and second grade samples

Table 48

Mean Scores Of Boys And Girls In Harter Scales

Scale	Boys Mean (SD)	Girls Mean (sd)	F Value
N	116	94	df=1,208
1. Competence			
Cognitive	3.25 (.48)	3.28 (.51)	.65
Physical	3.23 (.52)	3.28 (.48)	.37
Combined	3.24 (.46)	3.28 (.47)	.32
2. Social Acceptance			
Maternal	3.05 (.48)	3.02 (.56)	.21
Teacher	3.10 (.48)	3.11 (.52)	.26
Peers	3.14 (.53)	3.25 (.52)	1.26
Combined	3.09 (.44)	3.12 (.46)	.10

Table 49

Correlation Of Harter Scales With Verbal IQ In Comparison And Target Groups

Subscale	IQ Comparison	IQ Target
N	95	115
Cognitive Competence	.24*	.25*
Physical Competence	.19*	.26*
Maternal Acceptance	ns	ns
Teacher Acceptance	.22	ns
Peer Acceptance	.40**	.25*

* $p < .05$, ** $p < .01$

Table 50

Mean Scores Of Comparison And Target Groups In Harter Scales

Scale	Comparison Mean (SD)	Target Mean (SD)	F Value df(1,207)
N	95	115	
1. Competence			
Cognitive	3.38 (.48)	3.16 (.47)	12.03***
Physical	3.32 (.49)	3.19 (.50)	3.75*
Combined	3.35 (.46)	3.18 (.45)	8.41**
2. Acceptance			
Maternal	3.12 (.51)	2.97 (.53)	4.42*
Teacher	3.23 (.50)	3.00 (.48)	12.17***
Peers	3.33 (.51)	3.06 (.51)	16.34***
Combined	3.23 (.45)	3.01 (.42)	13.63***

* $p < .05$, ** $p < .01$, *** $p < .001$.

8.4.2.3 Effect of children's problem status on their Harter Scale scores

Considering that the correlations between IQ and the Harter scales were positive, the differences between the target and the comparison groups were examined using analysis of covariance with IQ as a covariate.

Table 50 shows that the mean scores of the target group were significantly lower than the means of the comparison group in both the competence and social acceptance domains. That is, children with emotional and behavioural problems had a less positive view of their cognitive and physical competence, as well as their own acceptance by their mothers, teachers and peers.

Since the magnitude of differences in mean scores of target and comparison groups in different subscales varied, further analyses were done to explore which items on the subscales were responsible for the differences in the two groups.

Table 51 shows that only two items- *good at sums* and *can write words*, on the perceived cognitive competence scale differentiated significantly between the two groups. The differences in the other items - *good at tables, can read alone, good at spellings* and *knows a lot at school* also reached a significance at .06 level. In the perceived physical competence subscale, the only item differentiating between the two groups was *good at climbing*. None of the other five items picked up any differences, although the differences in all items were in the same direction, that is, the children with problems (targets) scored lower than their comparisons.

Table 51

Items Of Competence Domain In Harter Scales That Differentiated Between Comparison And Target Groups

Item	Comparison Mean (SD)	Target Mean(SD)	F Value (df)
N	95	115	1,208
Cognitive Competence			
Good at tables	3.19 (.75)	2.98 (.82)	3.60+
Knows lots at school	3.33 (.66)	3.16 (.72)	3.12
Can read alone	3.38 (.62)	3.20 (.73)	3.58+
Can write words	3.55 (.56)	3.26 (.68)	10.87***
Good at spellings	3.38 (.70)	3.20 (.74)	3.19
Good at sums	3.47 (.63)	3.15 (.72)	11.95***
Physical Competence			
Good at swinging	3.26 (.69)	3.17 (.75)	.95
Goood at climbing	3.45 (.66)	3.26 (.68)	4.25*
Good at bouncing	3.32 (.67)	3.24 (.72)	0.56
Good at hoping	3.33 (.71)	3.20 (.75)	1.55
Good at running	3.38 (.69)	3.26 (.68)	1.56
Good at jumping rope	3.21 (.80)	3.03 (.93)	2.12

+ $p < .06$ level, * $p < .05$ level, *** $p < .001$

Similarly, only one of the items- *mum cooks favourite foods*- differentiated between the comparison and target groups from the maternal acceptance subscale (Table 52). However, in the peer and teacher acceptance subscales, five of the six items each differentiated between the two groups. Children in the target group viewed themselves less positively as compared with the comparison children on, *'being praised by the teachers', 'being liked by the teacher' 'being called for answering questions in the class' and 'getting stars on work'.* They also viewed themselves less positively on, *'having friends to play with', 'others sharing their toys with them', 'getting asked to play'* and *'others liking to sit next to them'* .

8.4.2.4 Intercorrelations between subscales of the Harter Scale

In order to explore the extent to which children in both groups: target and comparison, were varying between different subscales, the intercorrelations between the subscales were examined using Pearson's product-moment correlations. Table 53 shows high but not perfect correlations among the subscales (ranging from 0.66 to 0.75) for the comparison group. The correlation of the two competence subscales with each other was the same as the correlation of the two competence subscales with the acceptance subscales. This indicated a considerable consistency in how children in the comparison group viewed their own competence and their acceptance by their mothers, teachers and peers. In other words, a child (without reported problems) who thinks highly of his cognitive competence is likely to view himself as better accepted by his mother, teacher or peers and vice versa.

The picture was somewhat different for the target group children. The intercorrelations between the subscales were positive and significant but varied more

Table 52

Items Of Social Acceptance Subscale In Harter Scale That Differentiated Between Comparison And Target Groups

Item	Comparison Mean (SD)	Target Mean(SD)	F Value (df)
N	95	115	1,208
Maternal Acceptance			
Mum lets go to play at friends place	3.14 (.77)	2.99 (.80)	1.79
Mum takes to visit places	3.21 (.73)	3.09 (.78)	1.19
Mum cooks favourite foods	3.34 (.71)	3.13 (.74)	4.18*
Mum narrates stories	3.16 (.88)	3.00 (.84)	1.77
Mum lets stay overnight	2.65 (1.0)	2.43 (1.04)	2.33
Mum talks to you	3.24 (.77)	3.17 (.75)	0.42
Teacher Acceptence			
Teacher praises	3.27 (.69)	3.02 (.71)	6.91**
Teacher answer queries	3.36 (.70)	3.08 (.85)	6.60**
Teacher calls for me to answer	3.37 (.76)	3.09 (.76)	7.19**
Teacher doesn't tell off	2.96 (.71)	2.71 (.75)	5.83**
Teacher shows affection	3.19 (.78)	3.09 (.73)	0.97
Teacher gives stars on work	3.25 (.80)	3.02 (.78)	4.61*
Peer Acceptence			
Has lots of friends	3.14 (.79)	2.82 (.96)	6.72**
Others share toys	3.25 (.84)	3.00 (.88)	4.49*
Has friends to play games with	3.32 (.72)	3.12 (.80)	3.37
Has friends on the ground	3.41 (.71)	3.19 (.79)	4.38*
Gets asked to play	3.43 (.66)	3.08 (.77)	12.32***
Others sit next to him	3.42 (.68)	3.14 (.75)	8.04**

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 53

Intercorrelation of Harter Subscales In Comparison And Target Groups

Subscale	Competence		Acceptance	
	Cognitive	Physical	Maternal	Teacher
Comparison Group (N = 95)				
Physical Competence	.75			
Maternal Acceptance	.72[a]	.73[a]		
Teacher Acceptance	.74	.67	.79	
Peer Acceptance	.74[a]	.72[a]	.66	.68[a]
Target Group (N = 115)				
Physical Competence	.72[a]			
Maternal Acceptance	.54[b]	.52[b]		
Teacher Acceptance	.66	.61	.65	
Peer Acceptance	.54[b]	.53[b]	.49	.48[b]

All correlations are significant at .001 level

Values marked [a] are significantly different than values marked [b] in the same columns using Fisher's Zr transformation at 0.05 level.

$Z = 2.20$, $p < .05$ for the smallest difference in correlations.

between the subscales than they did in the comparison group (0.48 to 0.72). The differences in the correlations between competence and acceptance domains were examined using Fishers' Z*r* transformation.

The correlations between the cognitive competence and maternal as well as peer acceptance subscales were significantly lower than the correlations between the cognitive and physical competence scales. The correlation between cognitive and physical competence was not significantly different from the correlation between cognitive competence and teacher acceptance.

When the correlations between corresponding domains of the target and comparison groups were compared, significant differences were found in six combinations: the correlation of cognitive/physical competence with maternal acceptance; of cognitive/physical competence with peer acceptance; and of maternal/teacher acceptance with peer acceptance- were higher in comparison children than in the target group (see Table 53). These results indicated higher consistency across subscales among the comparison children when compared with the target group children.

8.4.2.5 Effect of type of problems on the Harter Scale scores

Follow up analyses were carried out to examine the differences between subgroups of children showing internalising, externalising and multiple problems. Table 54 shows the results from univariate analyses of covariance with Student-Newman-Keuls post-hoc tests (alpha set at .05 level) to examine the differences in all possible pairs of means.

Table 54

Mean Scores Of Children With Different Types Of Emotional And Behavioural Problems In Harter Scales

Scale	I	M	E	C	F Value
N	31	48	36	95	df = 3,205
1 Competence					
Cognitive	3.05 (.49)[a]	3.10 (.43)[a]	3.33 (.48)[c]	3.38 (.48)[d]	6.52***
Physical	3.14 (.51)	3.09 (.48)[a]	3.38 (.48)[c]	3.32 (.49)[d]	3.80**
Combined	3.09(.46)[a]	3.10 (.42)[a]	3.35 (.45)[c]	3.35 (.46)[d]	5.68***
2 Acceptence					
Maternal	2.93 (.56)	2.93 (.44)	3.05 (.61)	3.12 (.51)	1.93
Teacher	2.94 (.44)[a]	2.98 (.45)[a]	3.08 (.54)	3.23 (.50)[b]	4.56**
Peers	2.98 (.51)[a]	3.03 (.44)[a]	3.17 (.57)	3.33 (.51)[b]	6.38***
Combined	2.95 (.45)[a]	2.98 (.33)[a]	3.10 (.49)	3.23 (.45)[b]	5.35***

Mean scores marked a are significantly different from means marked as c and d in the same row, by Student Newman-Keuls post-hoc test with alpha set at .05 level. Those marked as d are also significantly different from b.

I= Internalising Group, E= Externalising Group, M= Multiple Problems Group, C= Comparison Group,

** $p < .01$, *** $p < .001$.

An examination of Table 54 shows that children with externalising problems did not differ from the comparison group in any of the combined or separate subscales in either the competence or social acceptance domains. They were even more positive than the other problem groups in the competence domain.

The children with internalising and multiple problems scored significantly lower than the comparison group in both the combined competence and combined social acceptance domains.

When each subscale of the competence and social acceptance scales was examined separately, except for the maternal acceptance subscale which did not differentiate between any subgroups, the children with internalising and multiple problems scored significantly lower in all individual subscales than the comparison group. They were also less positive than the children with externalising problems in the cognitive competence subscales.

Briefly then, the overall group differences found between the target and comparison groups in perceived competence and social acceptance scales were mainly due to those children who presented internalising and multiple problems and not to those with externalising problems.

8.4.3 INCOMPLETE DOLL STORIES TASKS

The Incomplete Doll Stories Task was used to examine the children's view of their relationships with their mothers, teachers and peers. The responses on this task were scored on a five point scale with higher scores depicting a more positive view of the

relationships. The scores of the 'mother', 'teacher' and 'peer' stories were each summed separately and a mean score was computed which represented the child's overall view of the respective relationship. The scores of the children on this task were analysed in the same way as the Harter Scale.

First of all, the internal consistencies in scores were considered. Table 55 gives results from these analyses along with the comparable figures from Cassidy (1988) for mother related stories for the sake of a broad comparison (bearing in mind that the procedure to score the stories was modified). Table 55 shows that the overall internal consistency was comparable with Cassidy's figure (0.78 in both cases). However, if only mother related stories are compared the internal consistency is lower in the present study.

8.4.3.1 Effect of gender on scores in the Incomplete Doll Stories Task

Table 56 shows that the differences between the mean scores in the mother, teacher and peer related stories of boys and girls were non- significant.

8.4.3.2 Correlation of IQ with scores in the Stories Task

The correlations between the children's IQ and scores on the stories in the three areas were examined using the Pearson's product moment method. All correlations were low but significant and ranged from 0.18 to 0.38 (see Table 57).

Table 55

Internal Consistency Of Incomplete Doll Stories Task

Stories	Comparison Group	Target Group
1. Mother	.63	.67
2. Teacher	.52	.43
3. Peer group	.73	.74
Total scale	.78	.75

Cassidy (1988) reported an internal consistency of 0.78 using Cronbach's Alpha

Table 56

Mean Score Of Boys And Girls In Incomplete Doll Stories Task

Story	Boys	Girls	F-Val.
	Mean (SD)	Mean (SD)	(df)
Mother Related	3.03 (0.92)	2.95 (0.95)	.35 (1, 205)
Teacher Related	3.23 (0.90)	3.15 (0.88)	.33 (1, 197)
Peer Related	3.21 (0.89)	3.19 (0.99)	.02 (1, 197)

Table 57

Correlation Of Incomplete Doll Stories Task With Verbal IQ For Comparison And Target Groups.

Stories	Comparison	Target
N	95	115
Mother	.31**	.26**
Teacher	.38**	.31***
Peer	.22*	.18

* $p < .05$, ** $p < .001$, *** $p < .0001$

Table 58

Mean Scores Of Comparison And Target Group Children On Incomplete Doll Stories Task.

Stories	Comparison Mean (SD)	Target Mean (SD)	F Value (df)
1. Mother related	3.31 (.84)	2.75 (.94)	21.73*** (1,204)
2. Teacher related	3.41 (.88)	3.01 (.86)	11.73*** (1,196)
3. Peers related	3.45 (.86)	3.00 (.96)	11.88*** (1,196)

*** $p < .001$.

8.4.3.3 Effect of the children's problem status on their scores on the Stories Task

Table 58 shows that the children in the target group scored significantly lower than their matched comparisons in the mother, teacher and peer related stories. That is children with emotional and behavioural problems had a relatively negative view of their relationship with their mothers, teachers and peers.

In order to find out which stories in each area were accounted for the differences in mean scores of the target and comparison groups, the individual stories were analysed separately. Table 59 reveals that the children in the target group scored significantly lower than the comparison group children on the *present giving, sorry* and *noise in the dark* mother related stories. In the teacher related stories, the scores of the target group children were significantly lower on *the flower bringing* and *classwork stories.* The target group also scored lower than the comparison group on three of the four peer related stories- *the birthday party, new clothes and hurt away from home.*

8.4.3.4 Intercorrelations between mother, teacher and peer related stories

The intercorrelations among the stories were examined to explore the extent to which children varied across different relationships. Table 60 shows that the correlations between the children's views of their mother and teacher relationships were significantly higher than the correlations between their views of their mother and peer relationships. In other words, a child who views his relationship with the mother positively is more likely to view his relationship with his teacher in the same way as compared to his relationship with peers or vice versa.

Table 59

Stories Differentiating Between Comparison and Target Groups

Stories	Comparison	Target	F Value (df)
N	95	115	
1. Mother Related	Mean (SD)	Mean (SD)	
a. Present Giving	3.77 (1.04)	2.99 (1.35)	20.87*** (2,207)
b. Sorry	3.56(1.05)	3.28 (1.19)	11.53*** (2,207)
c. Doll/Bike Stolen	2.93 (1.51)	2.49 (1.49)	4.60* (2,206)
d. Noise in the Dark	2.94 (1.33)	2.45 (1.39)	6.44** (2,206)
2. Teacher Related			
a. Bringing Flower	3.94 (1.00)	3.36 (1.26)	12.81*** (2,203)
b. Sick in Classroom	3.41 (1.26)	3.13 (1.27)	2.40
c. Classwork	2.90 (1.40)	2.47 (1.30)	4.99* (2,199)
3. Peer Related			
a. Arriving Late to Play	3.10 (1.21)	2.81 (1.24)	2.77
b. B'day Party	3.55 (1.18)	3.05 (1.29)	8.02** (2,199)
c. New Clothes	3.34 (1.25)	2.89 (1.28)	6.22** (2,199)
d. Hurt away from Home	3.79 (.97)	3.22 (1.36)	11.81*** (2,199)

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 60

Intercorrelation Of Mother, Teacher And Peer Related Stories.

Stories	Teacher	Mother
Mother		
Comparison	.49***	
Target	.51***	
Peer		
Comparison	$.53_a$***	.27**
Target	$.32_b$***	.30**

Values marked a are greater than values marked b using Fishers' Z*r* transformation

** p < .01, *** p < .001.

When the correlations between mother, teacher and peer related stories in the comparison and target groups were compared, the correlation between teacher and peer related stories was significantly lower for the target group as compared to the comparison group (Pearson's r=.53, $p < .001$ for comparisons and r=.32, $p < .001$ for targets, the differences between the two is significant, using Fisher's Z_r transformation, $Z = 2.7$, $p < .05$).

8.4.3.5 Effect of types of problems on scores in the Stories Task

Table 61 shows that like the measures derived from the Harter scale, children with internalising and multiple problems scored significantly lower than the comparison children in mother, teacher and peer related stories. That is, children with internalising and multiple problems had a relatively negative view of their relationships with their mothers, teachers and peers.

The findings for children with externalising problems were also similar to those derived from the Harter Scale together with some differences. As with the Harter Scale, there was no significant difference between the comparison children and those with externalising problems on teacher and peer related stories. However, they scored significantly lower than the comparison children in mother related stories. In order to find out which of the mother related stories were bringing about this salient finding, further analyses were carried out on each story to study the differences in the scores of the subgroups. The findings are given in Table 62.

Table 62 shows that only two stories - the *present giving* and *sorry story*- differentiated between the subgroups. The externalisers did not score significantly

Table 61

Mean Scores of Children With Different Types of Problems on Incomplete Doll Stories Task

Scale	I	M	E	C	F Value
N	**31**	**48**	**38**	**95**	
1. Mother	2.71 (.94)[a]	2.63 (.99)[a]	2.94 (.87)[a]	3.31 (.84)[d]	7.54*** (df=3,203)
2. Teacher	2.84 (.89)[a]	3.02 (.94)[a]	3.15 (.74)	3.41 (.88)[d]	4.31** (df=3,195)
3. Peer group	2.85 (.97)[a]	3.02(1.01)[a]	3.12 (.91)	3.45 (.86)[d]	4.14** (df=3,195)

Mean scores marked a are significantly different from those marked d in the same row using Student-Newman-Keuls.

I= Internalisers, M= Multiple Problems, E= Externalisers, C= Comparison Group.

** $p < .01$, *** $p < .001$.

Table 62
Stories Differentiating Between Children With Different Types Of Emotional And Behavioural Problems.

Stories	I	M	E	C	F Value
N	**31**	**48**	**36**	**95**	**(df)**
1. Mother Related					
a. Present Giving	2.48 (1.26)[a]	3.04 (1.34)[b]	3.36 (1.28)c	3.77 (1.04)[d]	10.21*** (3,205)
b. Apologising	2.87 (1.31)[a]	2.86 (1.35)[a]	3.31 (1.09)	3.56 (1.05)[d]	4.96** (3,205)
c. Doll/Bike Stolen	2.73 (1.44)	2.29 (1.35)	2.56 (1.44)	2.93 (1.51)	2.13
d. Noise in Dark	2.58 (1.36)	2.31 (1.39)	2.53 (1.44)	2.94 (1.33)	2.43
3. Teacher Related					
a. Bringing Flower	3.32 (1.28)[a]	3.18 (1.30)[a]	3.61 (1.20)	3.94 (1.00)[d]	5.25*** (3,204)
b. Sick in Class	2.70 (1.39)[a]	3.10 (1.25)	3.54 (1.07)[d]	3.41 (1.26)[d]	3.30* (3,199)
c. Class Work	2.39 (1.17)	2.72 (1.33)	2.26 (1.34)	2.90 (1.39)	2.50
III. Peer Related					
a. Arriving Late	2.74 (1.32)	2.91 (1.25)	2.74 (1.17)	3.10 (1.21)	1.07ns
b. B'day Party	2.90 (1.30)	3.05 (1.31)	3.20 (1.30)	3.55 (1.18)	2.97* (3,200)
c. New Clothes	2.84 (1.16)	2.77 (1.38)	3.09 (1.27)	3.34 (1.25)	2.49
d. Hurt away/home	2.90 (1.33)	3.26 (1.42)	3.46 (1.29)	3.79 (0.97)	4.97*** (3,198)

Mean scores marked a are significantly different from those marked c & d in the same row using Student-Newman-Keuls test. Scores marked b are also significantly different from those marked d in the same row.

I= Internalisimg, M= Multiple, E= Externalising, C= Comparison, * $p < .05$, ** $p < .01$, *** $p < .001$.

lower than the comparison group on either of the stories. In fact their score on the present giving story was significantly higher than the score of the children with internalising problems on this story. The findings from the analyses of each story also indicated that the children with externalising problems scored significantly higher than those with internalising problems on another teacher related- *sick in classroom*- story.

To summarise, as with the Harter Scale, the target group children scored significantly lower than the comparison group in the Stories Task in all three relationship areas. The differences between the two groups were largely due to those who presented internalising and multiple problems and not to those with externalising problems.

8.4.4 The PUPPET INTERVIEW

This measure was also analysed in the same way as the Harter Scales and the Stories Task.

8.4.4.1 Effect of gender on the Puppet Interview scores

The scores in the Puppet Interview indicated the number of times a child viewed himself as being perfect. Table 63 shows that boys and girls did not differ significantly on the Puppet Interview scores.

Table 63

Mean Score Of Children In The Puppet Interview

Group	N	Mean (SD)	F Value
Comparison Group	94	4.57 (1.82)	.90ns (df=1,204)
Target Group	112	4.28 (2.47)	
Boys	113	4.38 (2.22)	.06ns (df=1,204)
Girls	93	4.46 (2.19)	

Table 64

Mean Score Of Children With Different Types Of Problems In The Puppet Interview

Type	Mean (SD)
1. Internalising	4.07 (2.48)
2. Externalising	4.39 (2.61)
3. Multiple	4.33 (2.39)
4. Comparison	4.58 (1.82)

F- Value = 0.42, df=3, 202

8.4.4.2 Correlation of IQ with the Puppet Interview

As with the other measures, the correlations between the IQ measure and the Puppet Interview scores was low but positive (Pearson's r= 0.22, p <.05 for the target group and 0.26, p < .05 for the comparison group).

8.4.4.3 Effect of the children's problem status on their Puppet Interview scores

Unlike the findings from the Harter Scale and the Stories Task, no significant difference was found between the target and the comparison group on their Puppet Interview scores (see Table 63). Similarly, the difference in the scores of children presenting different types of problems was also non-significant (Table 64). The direction of the differences was however, consistent with the findings from the Harter Scales and the stories task, with the comparison group scoring the highest and group with internalising problems scoring the lowest.

8.4.5 INTERCORRELATIONS AMONG THE HARTER SCALES, INCOMPLETE DOLL STORIES TASK AND THE PUPPET INTERVIEW

The intercorrelations among the three measures of social cognitions were examined for the target and comparison groups. Table 65 shows that intercorrelations among the measures ranged between 0.02 to 0.35 in the target group and between 0.14 to 0.36 in the comparison group. The correlations between the mother, teacher and peer related dimensions from the Harter scales and the Stories Task were surprisingly low, 0.21, 0.25 and 0.23 respectively for the comparison group and 0.23, 0.21 and 0.05 respectively for the target group. The findings were similar when intercorrelations

Table 65

Intercorrelation Of The Harter Scales With Incomplete Doll Stories Task And The Puppet Interview.

	Incomplete Doll Stories			Puppet
	Mother	Teacher	Peer	Interview
Harter scales				
Competence				
a. Cognitive				
Comparison	.24*	.22*	.15	.23*
Target	.23*	.32***	.09	.27**
B. Physical				
Comparison	.25*	.20*	.14	.27**
Target	.17	.26**	.02	.20*
C. Combined				
Comparison	.27**	.23*	.16	.27**
Target	.21*	.30*	.06	.25**
Acceptance				
a. Maternal				
Comparison	.21*	.19	.18	
Target	.23**	.21*	.17	.22*
B. Teacher				
Comparison	.25**	.25**	.19	
Target	.24**	.21*	.14	.33***
C. Peer				
Comparison	.29**	.36***	.23*	
Target	.21*	.35*	.05	.24*
D. Combined				
Comparison	.28**	.29**	.22*	.30***
Target	.27**	.31***	.14	.31***

* $p < .05$, ** $p < .01$, *** $p < .001$

among the three measures were examined separately for children with internalising, externalising and multiple problems.

The next chapter presents the discussion of the findings.

CHAPTER NINE

Discussion Of The Findings Of Study Three

Study Three was designed to explore whether children who show emotional and behavioural problems in the classroom setting differ in the way they think about themselves and their relationships with their mothers, peers and teachers from children who do not show such problems. In general, the results of the study supported the hypothesis regarding a meaningful link between social cognitions in children and their behaviour. Children who showed emotional and behavioural problems in the classroom setting were found to think less positively about themselves and their relationships with their mothers, peers and teachers than those who did not present these problems. A second aim of the study was to explore whether and how subgroups of children with predominantly internalising, externalising or both internalising and externalising (multiple) problems differed in the way they thought about themselves and their relationships. The follow up analyses indicated that children with internalising and multiple problems thought less positively about themselves whereas the children with externalising problems were as positive as the non-problem children in most respects. To the writer's knowledge, this study is the first one to document differences in the social cognitions of young children presenting and not presenting emotional and behavioural problems and to further examine the differences in distinct groups of children with different types of emotional and behavioural problems. Some previous studies have examined children's views of themselves, but have concentrated on older age groups.

Three instruments- the Harter Scales, Incomplete Doll Stories Task and the Puppet Interview, were used to examine the children's social cognitions. This section presents

a discussion of the findings resulting from these instruments. The discussion is divided into six parts. In the first part, the findings concerning the measurement properties of these instruments, together with gender differences in the findings are discussed. In the second part, the findings from the Harter Scales and the Stories Task regarding differences between the children who showed emotional and behavioural problems and their comparison children are discussed. The discussion of findings from the follow up analyses is presented in the third part. This is followed by a discussion of the findings from the Puppet Interview. Then, the interrelationship of the three instruments used to examine the children's social cognitions is discussed and finally, the general issues emerging from the findings of the study are taken up.

9.1 GENERAL PROPERTIES OF THE INSTRUMENTS

9.1.1 Harter Scales

The findings regarding the internal consistency of the Harter scales indicated that the responses of the children in this study were comparable with Harter and Pike's (1984) original consistency figures. The teacher acceptance subscale which was designed for use in this study and was added to the Harter scale, also showed consistency with the original body of the Harter scales. The mean scores for the items were likewise broadly comparable with the scores reported by the authors in that most of the items had a mean score above three with the possible range of scores being one to four.

The children's verbal IQ as measured by MISIC (Malin, 1970) was found to have low but significant correlations (0.19 to 0.26) with the cognitive and physical competence, as well as teacher acceptance, subscales for both groups of children- those who

showed emotional and behavioural problems and those who did not. The correlation of verbal IQ with the peer acceptance subscale for the children who did not present problems was noticeably higher than that for the other subscales, although it was moderate as such (0.40). The reasons for the relatively higher correlation between peer acceptance and verbal IQ were not clear. One possibility may be that children who do not present emotional and behavioural problems in the classroom and who have higher IQs are better accepted by their peers. But the findings on older children do not support this explanation. The findings in general provided evidence for the discriminant validity of the Harter scales as well as the teacher acceptance subscale added to this measure. The mean scores of boys and girls did not differ from each other. The findings concerning the low correlations with verbal IQ and gender differences were similar to those reported by Garrison et al. (1985).

9.1.2 Incomplete Doll Stories Task and the Puppet Interview

The findings from the Incomplete Doll Stories Task indicated that the new dimensions- peer and teacher related- meshed well with the the mother related domain of the task. The internal consistency for the overall task including mother, teacher and peer related stories was acceptable (0.78). However, when the internal consistency for each dimension was assessed separately, the Cronbach's alpha was moderate for the teacher and mother related stories- 0.52 and 0.60 respectively. The peer related stories showed a relatively high internal consistency (0.73). The alpha value for mother related stories was considerably lower than the similar value given by Cassidy (0.78 - Cassidy, 1988). The difference may be due to the lower number of stories (four in comparison with the original six) in the present study (Nunnaly, 1978). The correlations between verbal IQ and the measures obtained from the Incomplete Doll Stories Task

were low to moderate (0.18 to 0.38), providing evidence for the discriminant validity of the Stories Task. Likewise, the measures derived from the Puppet Interview also showed a low correlation with the verbal IQ of the children. No gender differences were found in either the Stories Task or the Puppet Interview.

9.2 Differences In The Way Children With Emotional And Behavioural Problems And Their Comparisons Thought About Themselves And Their Relationships

9.2.1 Harter Scales

The mean scores of children who showed emotional and behavioural problems and those who did not show problems in competence and social acceptance domains of the Harter Scales were compared using Analysis of Covariance with verbal IQ as the covariate. The findings revealed that the children with problems viewed themselves as less competent- cognitively as well as physically - than those who did not show the problems. They also viewed themselves as less well accepted by their mothers, teachers and peers. These findings extended recent results reported by Compas et al. (1991) for groups of older children (10 to 15 year olds). Compas and colleagues classified the children into problem or non-problem groups on the basis of reports obtained from their mothers using the Child Behaviour Checklist (Achenbach and Edelbrock, 1983*a*) and self reports obtained via the Youth Report Form (Achenbach and Edelbrock, 1987). They found that irrespective of whether the children were classified as having problems on the basis of maternal reports or self reports, they perceived their competence and social acceptance as less positive on the Harter Scales (Harter, 1982) than those who did not present the problems. The present findings add to their results by demonstrating similar differences, despite variations in methods and samples, as the children here were selected by their teachers and were

much younger in age. The findings are also on similar lines to those reported by Apodaca and Cowen (1982) who showed that elementary school children (first to fifth graders) referred to school mental health services for being maladjusted, had a lower self- esteem than non-referred well-adjusted children.

Unlike the present study, Garrison, Earls and Kindlon (1983) found only the Harter maternal acceptance subscale to be significantly related with behavioural problems in 6-7 year olds. In the study by Garrison and colleagues, children who scored low on the maternal acceptance subscale had significantly higher scores on teacher ratings of behavioural problems, but children scoring low in the other domains of the Harter scales did not differ in their score on ratings of behavioural problems. The discrepancy between the findings from the two studies may be due to methodological differences. The children were grouped on the basis of behavioural problems in the present study, whereas Garrison et al. (1983) selected a normative sample, grouped them as those having high and low self competence and acceptance scores, and investigated the correlation between the domains of self and behavioural problems. The differences may also be due to a relatively smaller size of the sample in Garrison et al's study (83 as compared to 210 children in the present study).

Although the mean scores of the two groups of children in the present study were in the same direction, the magnitude of the differences in each subscale varied. In order to find out which items in each subscale were responsible for creating the overall differences in the subscales, the mean scores for each item of the Harter Scale including the teacher acceptance subscale were compared. The findings indicated that only fourteen of the 30 items in the entire scale differentiated between the groups. For the rest of the items, the differences were in the same direction, in that children with

problems scored lower than those who did not present problems, but the differences did not reach significant levels. These findings underscore the need to use scales instead of relying upon single item measures for assessing psychological variables. Marsh, Barnes and Hocevar (1985) reached a similar conclusion in their attempt to measure the self-concept. They assessed the specific components of self- concept with both multi-item scales and single item responses, and concluded that the multi-item scales had better psychometric properties than the single-item responses.

To find out the relationships among the different aspects of the Harter Scales and whether they had any differential effect on children who presented problems and their non- problem counterparts, the intercorrelations among the subscales were examined for both the groups separately. The findings from the correlations indicated that children with emotional and behavioural problems varied more between the subscales as compared with children who did not present such problems. In other words, if a child with emotional and behavioural problems viewed himself as less positive in one domain of self, he might well differ in his view on another domain. These findings provide support to Harter's (1982; 1986) and others' (Marsh & Shavelson, 1985) emphasis of the need to study a dimensional profile of self rather than studying it as a unitary concept.

9.2.2 Incomplete Doll Stories Task

The mean scores of children showing emotional and behavioural problems in each aspect of the Stories Task were compared with the means of the children who did not present the problems using similar procedures to the Harter Scales. The findings revealed that the children who showed emotional and behavioural problems viewed

their relationships with their mothers, teachers and peers less positively than those who did not present the problems. These findings were in the expected direction and overlapped with the results from the Harter Scales, showing convergence of findings within the study.

The literature on how children with emotional and behavioural problems themselves view their relationships with their mothers, peers and teachers is scanty. However, the findings of the study mesh well with the body of literature on how children with poor peer relations- who are at risk of developing emotional and behavioural problems (Parker and Asher, 1987)- view their relationships with significant others including parents, teachers and peers. For example, Patterson, Kupersmidt and Griesler (1990) documented that rejected- aggressive children viewed their relationships with their fathers and friends as unsupportive and filled with conflict. Similarly Crick and Ladd (1988), Asher, Parkhurst, Hymel, & Williams (1990) and Hymel and Franke (1985) have reported that children who are judged as having poor peer relations on socio-metric assessments view themselves as left out by others and lonely.

The findings from Radke-Yarrow, Richters and Wilson's (1988) work on parent-child relationships have also shown results similar to the present study. In their work with six year olds, they found that children who viewed the mother as a 'punisher', compared with those who did not, were significantly more likely to be rated as having psychiatric problems. Similarly, Hazzard, Christensen & Margolin (1983) also found that children with behaviour problems reported more negative maternal behaviours on the Parent Perception Inventory (Hazzard and Christensen, 1983).

In order to examine the efficiency of each story situation in differentiating between the target and other children, the mean scores in each story were compared. The results indicated that only two stories in each domain differentiated between the groups. However, the direction of the differences in the case of all stories was the same. These findings were similar to the results of the item analyses in the Harter scales, where only a few of the items in each subscale picked up differences in the groups. These fluctuations within each aspect of the relationships assessed from the Stories Task are in line with the argument, already presented, that a scale sampling many items works better to assess a variable than a single item. However, it is important to recognise, too, that these fluctuations may show important variabilities within the children and/ or in the situations sampled in the tasks. For example, the two mother related stories which picked up the differences between the groups were, *the present story* (when the child protagonist brings a present for the mother) and *the sorry story* (when the child comes and apologises to the mother). In both these situations the mother is present in the setting when the child is asked to make a story. However, in the other two stories which did not pick up the differences - *the noise in the dark* and *the loud noise* - the mother is initially not in the scene (see Chapter Seven for detail of the stories). Clearly then, the context of the story or the item in a task is important and may to some extent be responsible for the low reliability of the stories within each area.

On the whole, the findings from the Harter scales and the Doll Stories Task indicated that as an atypical group, children with emotional and behavioural problems viewed themselves as well as their relationships with their mothers, teachers and peers less positively than those who did not show these problems. These findings support the hypothesis of a meaningful connection between children's social cognitions and their

behaviour. The findings might be considered consistent with Bowlby's (1980) theory in which children who show emotional and behavioural problems are considered to view their world including their attachment figure(s) as unsupportive, uncaring and themselves as unworthy of support and care. However, it may be noted that the scores of the children in most of the measures were at or above the mean scores denoting a mainly positive view of their relationships with their mothers, teachers and peers.

9.3 Children with internalising, externalising, multiple and no emotional and behavioural problems- Differences in the way they thought about themselves and their relationships.

A further aim was to find out how children who presented internalising, externalising, multiple and no emotional and behavioural problems differed in the way they thought about themselves and their relationships with their mothers, teachers and peers.

9.3.1 Harter Scales And Incomplete Doll Stories Task

The findings from the follow up analyses of the competence and social acceptance domains of the Harter Scales indicated that children with internalising and multiple problems considered themselves to be less competent and less well accepted than their non-problem counterparts. In contrast, children with externalising problems did not view their competence and social acceptance to be any lower than that of the non- problem ones; rather they viewed themselves as significantly more competent (but not more socially accepted) than the children who presented internalising or multiple problems. When each subscale in the Harter competence and social acceptance domains was examined individually, it was found that the maternal acceptance subscale did not differentiate between any of the groups, indicating that the differences found in the social acceptance scale were, largely, due to the teacher and peer acceptance subscales.

The findings from the follow up analyses of the Incomplete Doll Stories Task were also similar to the Harter Scales. The children with internalising and multiple problems viewed their relationships with their mothers, teachers and peers as less positive than those who did not show problems. In contrast, the children with externalising problems viewed their relationships with their teachers and peers as positively as the non-problem children. They were significantly lower than the non-problem children in the mother related stories, but when each story was examined separately, only two stories (*the present giving and the sorry story*) differentiated between the groups. In both the stories, they were as positive as the non-problem children and scored significantly higher than the internalisers and multiple problem children in *the present giving story*.

The main difference in the findings of the two measures- Harter Scales and the Stories Task- was that the maternal acceptance subscale of the Harter Scales did not differentiate between the subgroups, but the mother related stories did. However, when each item of the maternal components of the two measures were examined individually, the trend of the differences was the same.

On the whole then, the measures derived from the two tasks were quite similar. Figure 9 & 10 show the consistency with which the children with internalising and multiple problems scored lower than the non-problem children in both the tasks. The children with externalising problems generally scored as positively as the non-problem children.

Two important questions arise from an overview of the findings from these two tasks.

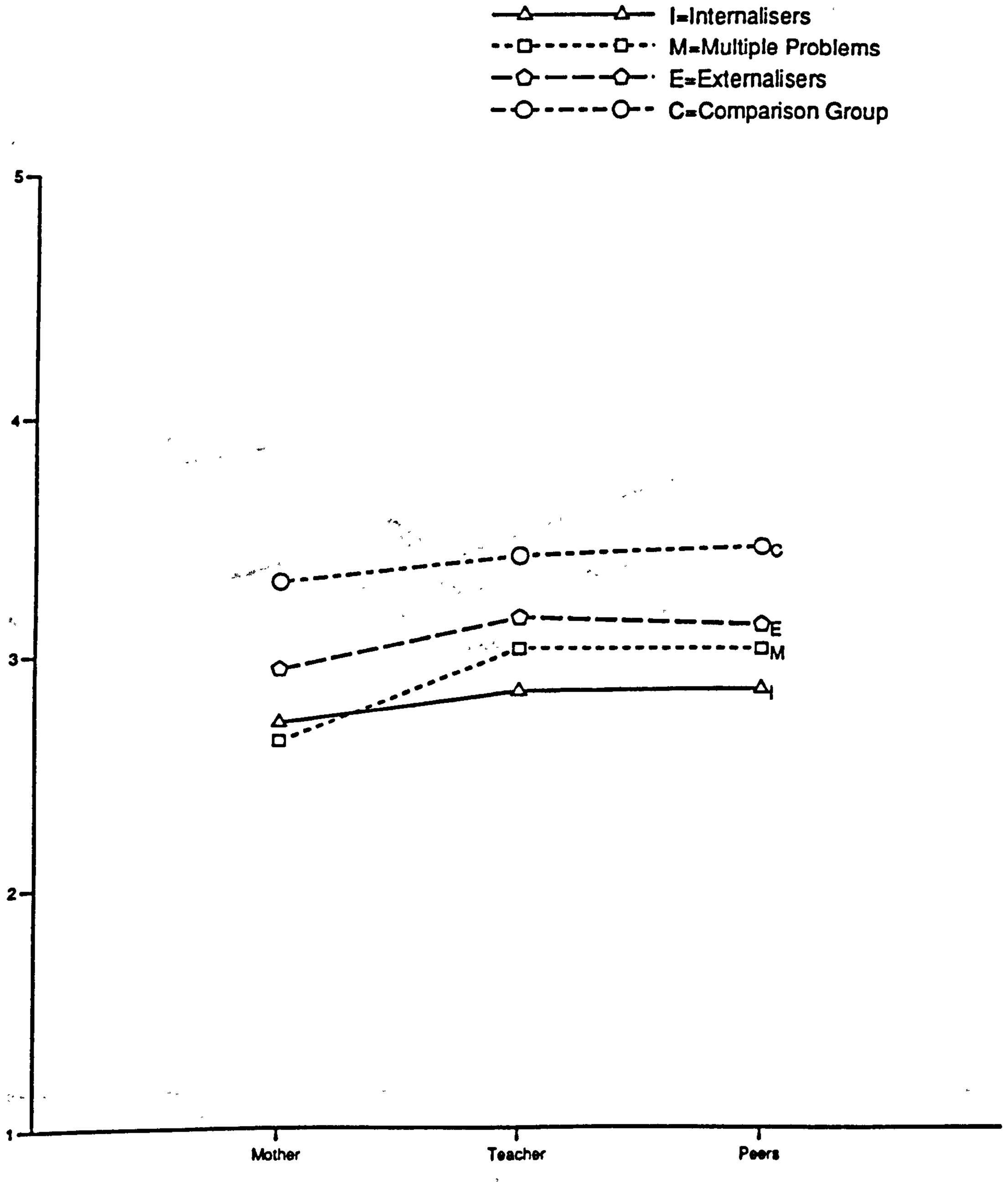

Figure 9: Mean Scores Of Children With Different Types Of Problems On Incomplete Doll Stories Task.

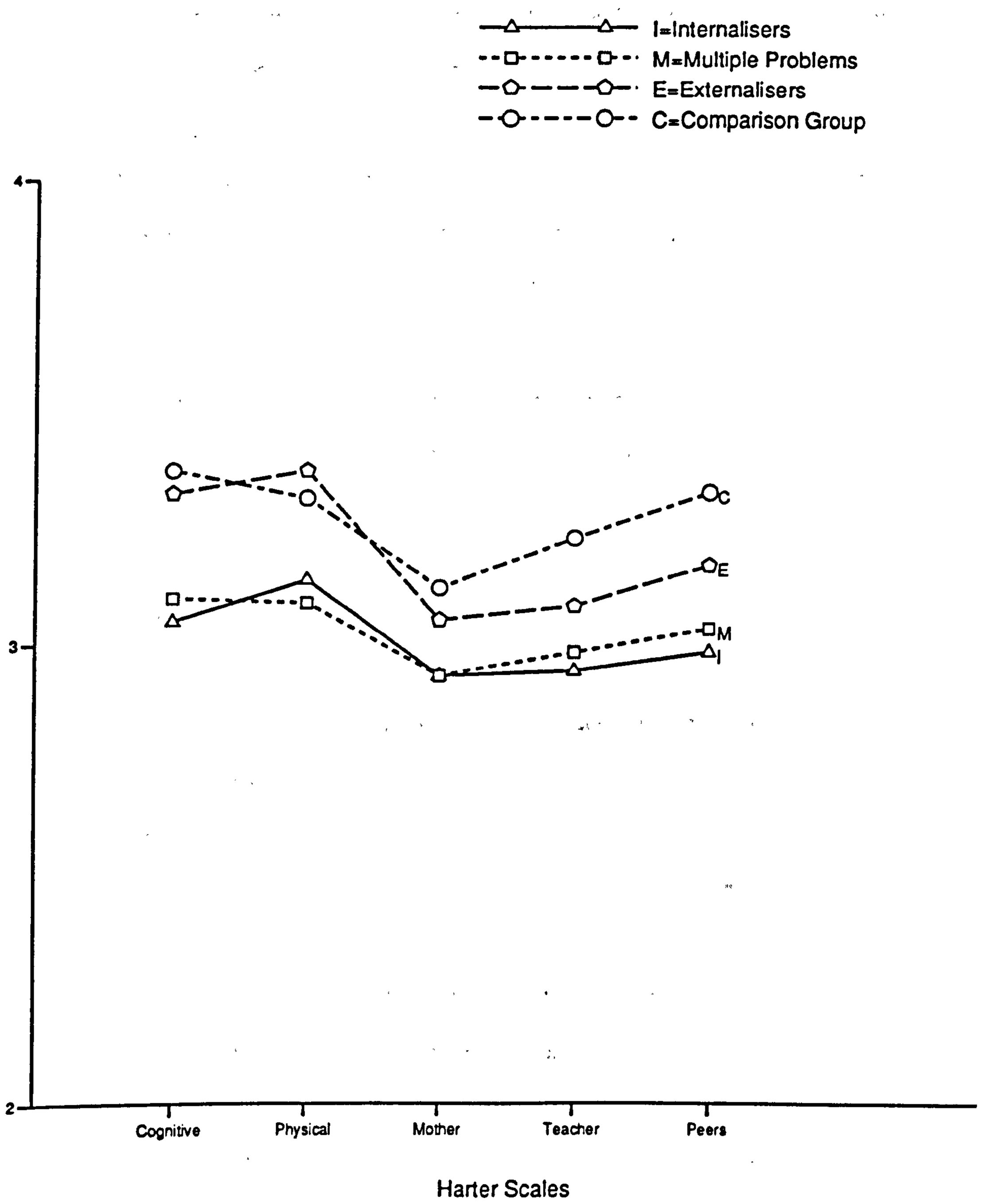

Figure 10: Mean Scores Of Children With Different Types Of Problems In Perceived Competence And Social Acceptance

(i) Why do children with internalising and multiple problems view themselves and their social relationships less positively than non-problem children?

(ii) Why do children with externalising problems view themselves as positively as the non-problem children and even better than their counterparts with internalising and multiple problems on some elements of the tasks?

These questions are discussed later in the general discussion section when the findings from the Puppet Interview and the intercorrelations among the measures can be taken into account.

9.4 The Puppet Interview

Unlike the Harter Scales and the Stories Task, the Puppet Interview neither differentiated between the overall groups, that is, groups of children selected for showing or not showing emotional and behavioural problems, nor among the subgroups of children showing internalising, externalising and multiple problems.

Cassidy (1987) designed this measure to assess a global view of the self (global self-esteem) in children. In her study of six year olds, she found that seven of the eight children who were classified as insecurely attached to their mothers (insecure/ avoidant) were rated as 'perfect' on the basis of the criteria described earlier to score this task (see Chapter seven). Cassidy interpreted insistence on claiming to be 'perfect' in insecure/ avoidant children as a tendency for *defensive avoidance*. Drawing from the attachment literature she stated, "if the assumption that avoidant children have experienced a good deal of rejection by the attachment figure is valid, then their

reluctance to recognise or admit any imperfections that might lead to further rejection seems fully reasonable". She further believed the propensity to claim perfection of the self in insecure/avoidant children to be an estimate of a self-esteem which is "so low and fragile that the individual cannot tolerate discovery of the slightest imperfection" (1988, p.131). As discussed in Chapter Five insecurity of attachment has been found to predict emotional and behavioural problems in children (Lewis et al., 1984; Erickson et al., 1985). More recently, Speltz, et al., (1990) and Deklyen (1991) found significantly higher numbers of clinic referred disruptive children to show insecure attachment patterns as compared to a comparison group.

In the present study, it was expected that children with emotional and behavioural problems would claim a higher number of perfections as compared with the children who did not present the problems, however, this was not the case. As described in the method section, the task was translated into *Panjabi* for use in this study. Also some changes were made in the method of carrying out this task and the scoring system. (see Chapter Seven for modifications of the Puppet Interview). It may be that the changes made to the task affected it so that it did not pick up the expected differences in this study. Since similar modifications were made to the Incomplete Doll Stories Task and to the Harter Scales, both of which picked up the differences in the problem and non-problem groups in the present study, it may be that this task is more sensitive to changes than the others used in this study.

However, it is worth drawing attention to the pattern of children's scores in the Puppet Interview in the present study (see Table 64 & 65). In contrast to the expectation that children with emotional and behavioural problems would claim a higher number of perfections, children who did not show the problems tended to do

so, though the differences were statistically non-significant. It is important to note that this pattern of higher scores of non-problem children in the Puppet Interview, indicating a more positive view of the self, is similar to the pattern of scores found for the other social cognition measures used in this study. That is, in both the Harter Scales and the Stories Task, children who did not show emotional and behavioural problems scored for a more positive view of themselves and their relationships than those who showed the problems. Likewise, the trend of differences for the subgroups of children with different types of problems in the Puppet Interview was similar in direction to that found in most of the measures derived from the Harter Scales and the Stories Task. Children who did not show problems claimed the highest number of perfections, followed by the externalisers, then the multiple problem children and then the internalisers. Thus, the findings of the Puppet Interview showed some convergence within the study.

It is also interesting to note that seven (35%) of the 22 securely attached children in Cassidy's (1988) study were also classified as 'perfect', that is, they claimed complete perfection of self. Moreover, security of attachment correlated positively with the measures derived from the Harter Scales (Harter & Pike, 1984) in Cassidy's study. In particular, securely attached children rated themselves positively on Harter's scale of global self- worth (Harter, 1982) (Pearson's $r = 0.40$, $p < .01$ between Harter measures and an attachment classification derived from reunion behaviour). Thus, her findings showed a discrepancy in the measures derived from the Puppet Interview and the Harter Scales.

Broadly then, the findings of the present study as far as the Harter measures are concerned are similar in direction to Cassidy's findings (Cassidy, 1988). The present findings for the Puppet Interview are also similar to Cassidy's findings for one-third of

her securely attached children. It may be that a higher number of claims to perfection of the self on the Puppet Interview does not necessarily reflect a low and fragile view of the self. More research may be helpful in illuminating the way the scores from the Puppet Interview may be interpreted.

9.5 Intercorrelations among the Harter Scales, the Incomplete Doll Stories Task and the Puppet Interview

The three measures of social cognition- the Harter Scales, the Doll Stories and the Puppet Interview- showed a broad similarity in the way they differentiated between children who showed emotional and behavioural problems and those who did not present these problems. The expectation was that they would show a high correlation with each other. However, the intercorrelations among these measures were low but significant. Cassidy (1988) reported even weaker correlations among these measures than those found in the present study. Several factors might have been responsible for these low correlations including fluctuations within the instruments. For example, in the Harter Scales, all the items did not differentiate significantly between the groups. Similarly all the stories did not differentiate between the groups. The cumulative effect of these fluctuations may be one reason for the low correlations. To some extent, these findings bear upon the issue of the reliability of these instruments and the consistency with which children respond on these tasks more generally.

However, the findings from other social cognition research, exploring somewhat different dimensions of social cognition, suggests that there is a need to reflect on the assumption that these measures must show a high correlation. For example, Rubin and Krasonar (1986) found that the type of situation used as a stimulus to assess social cognitive functioning had an important role on the outcome measures. Children

with peer-related and behavioural problems in their study were relatively deficient in response search skills in object acquisition situations (e.g., acquiring a toy from a peer) but not in peer group entry situations. Downey and Walker (1989) showed that interpersonal problem solving competence (Spivack et al., 1986) and the quality of attributions made by children regarding ambiguous peer behaviour (Dodge, 1980) were completely uncorrelated (r =0.01). In addition, they found these two social cognition measures to be differentially associated with emotional and behavioural problems.

Dodge and Feldman (1990) from a review of research on social cognition and sociometric status concluded that the amount of variance in peer popularity accounted for by the social-cognitive measures is significant but small, suggesting that there is a good deal of divergence in social-cognitive functioning within the popular and unpopular groups of children. To explain the divergence in social cognitive functioning within the groups, they argued that "just as research has revealed a great deal of cross-situational variation in an individual's social-behavioural patterns (Mischel, 1968), so too it seems that children vary across situations in their social-cognitive patterns" (p. 134).

Building on Dodge and Feldman's (1990) argument, it seems plausible to contend that a child who thinks that his mother will be pleased if he brings home a present for her may not essentially think that she will be helpful if he wakes her up in the middle of the night. Similarly a child who thinks peers will let him play with them if he arrives late in the playground, may not think that they will share their toys with him or will sit next to him in the classroom. Thus, fluctuations within children, and within and between measures seem reasonable and may not imply poor reliability of the measures used in this study or of children as reporters of their social cognitions.

Considering that different measures of social cognitive functioning show low correlations with each other, Dodge and Feldman (1990) proposed that multiple components of social cognition in children be assessed to enable stronger prediction of association between social-cognition and social behaviour. The argument made earlier in this discussion that multiple items on a scale predict group differences better than single item, dove-tails nicely with Dodge and Feldman's (1990) contentions. This however, does suggest the need for more careful sampling of the situations in social-cognition tasks. In this study stories in the peer and teacher related dimensions were selected largely on an intuitive basis. Four of the six stories in Cassidy's (1987) mother related aspect were also selected intuitively. As discussed earlier, only two stories from each of these three domains differentiated between the problem and non-problem children. Similarly Harter and Pike (1984) selected the items in the Harter Scales on an a priori basis (except those in the maternal acceptance domain) and only nine of the 24 items from their scale differentiated between the problem and non-problem groups in this study. In future construction of social-cognition measures, it may be useful to discuss situations to be sampled with experts, for example, teachers, counsellors, or with children themselves before sampling them in the tasks. It may also be worthwhile to make observations of relevant real life situations or to select situations found effective in previous studies in the area of social cognition.

9.6 General Discussion

On the whole, the findings from the three social cognition measures used in the study were broadly consistent, though the intercorrelations among them were low. These findings raise questions which are discussed below:

9.6.1 Why do children with internalising and multiple problems view themselves and their social relationships less positively than non-problem children?

Children with internalising and multiple problems, in the present study, consistently viewed themselves and their relationships less positively than did their non-problem classmates (though the Puppet Interview results were statistically non-significant). They were even lower than the children with externalising problems in some of the items. Some writers have suggested a self-deprecating bias in the thinking of children who experience depression (Kovacs & Beck, 1977). Consistent with this many researchers have found depressed children and adolecents to have low self-worth, low feelings of competence, to experience greater hopelessness in life and to indulge more in self-blame (Renouf and Harter, 1990; Asarnow et al., 1987; Field et al., 1987 and Kaslow et al., 1984). Is it possible that a self-deprecating bias proposed for the depressed children extends to children who show a variety of internalising problems and to those who show internalising problems along with externalising problems?

If so, these findings bear upon the issue of construct validity of the two concepts-depression and internalising problems. The children with internalising problems in the present study were selected for showing 'emotional/sensitive' and 'socially withdrawn' behaviours. In Study One of this thesis, a correlation of 0.78 was found between the PBCL's 'emotional/sensitive' and the TRF's 'depressed' factors (see Table 15 in Chapter Two). A high correlation between these two factors further supports the view regarding the need to reflect on the construct validity of depression and internalising problems.

However, it is important to consider here that in the present study, although children with internalising and multiple problems scored significantly lower than the non-problem

children and in some elements lower than the children with externalising problems, their own scores of self-perceived competence and social acceptance were positive (ranging between 2.95 to 3.10, S.D. 0.33 to 0.46; from Table 54). Similarly, in the Stories Task, their scores ranged between 2.71 to 2.85 (S.D. = 0.89 to 0.97; from Table 61). The positive scores of children with internalising and multiple problems suggest the need to reflect on the issue of whether or not they have a negative bias in their social cognitions. Even if they had negative scores in these measures, there would be a possibility that these children were simply being more realistic or truthful in their reports than showing self-deprecating bias.

Some external or observational measures may help in resolving this issue. In the present study, no such measures were available, though the verbal IQ of the children could to some extent be regarded as an external measure of their cognitive competence. An examination of the IQ scores for the subgroups of children indicated that children with internalising and multiple problems, like those with externalising problems, had a significantly lower IQ than their non-problem counterparts (see Table 66). However, on the social cognition measures, unlike the children with externalising problems, these children rated themselves lower than the non-problem children and even lower than those with externalising problems on cognitive competence and some other elements of the tasks. Since this happened consistently on all the measures, it may be that these children have a self-deprecating tendency. But it may also be that these children are being more honest than the children with externalising problems. More research will be necessary to address this issue and it is a promising query for future research.

Table 66

Differences In Verbal IQ Of Children

Group	IQ
	Mean (S.D.)
Internalising	105[a] (15.18)
Multiple	104[a] (15.04)
Externalising	106[a](14.87)
Comparison	115[b] (14.83)

F= 7.43, df=3, 206, p. < .000

Values marked a are significantly different than values marked b

9.6.2 Why do children with externalising problems score as positively as those children who do not show emotional and behavioural problems?

The children with externalising problems *mainly* scored as positively as the non-problem children on the stories task and the Harter scales, and were even better than the internalising and multiple problem children on some items of the tasks. These findings, though similar to some findings reported by Compas et al (1991) and Schneider and Leitenberg (1989), were contrary to the common clinical impression that children with emotional and behavioural problems including those with externalising problems have a negative view of themselves (Zimet and Farley, 1984; Hughes, 1983). The findings were also contrary to the results reported by some empirical studies. For example, Lochman and Lampron (1986), found that aggressive boys (comparable to externalisers in the present study) had a lower self esteem than their non-aggressive peers. The differences in the findings of the present study and Lochman and Lampron's study may to some extent be explained by the way they selected their sample. Despite observational evidence in their study that aggressive children showed more passive off-task behaviour, Lochman and Lampron did not pay any attention to the internalising aspect of children's problems and termed them as 'aggressive' on the basis of teachers' nominations. It is possible then, that the boys termed as aggressive by Lochman and Lampron actually had multiple problems. If so, their findings would be consistent with the present findings, as those with multiple problems in the present study reported a less positive view of themselves and their relationships than the non-problem children. Those who have paid attention to both internalising and externalising aspects have found results similar to the present study. For example, Schneider and Leitenberg (1989) reported that aggressive children in their study were as positive as the non-problem children but those who were agressive as well as withdrawn, rated themselves lower than the non-problem children. Although these arguements explain

the similarity and differences of the present findings with those by others to some extent, the question why the externalisers do not differ in their social cognitions from those who did not show problems remains unanswered.

There may be several reasons why externalisers have as positive a view of themselves as those who do not present emotional and behavioural problems. Schneider and Leitenberg (1989) proposed that one reason might be their popularity in the peer group. However, recent findings by Hymel, Rubin, Rowden and LeMare (1990) indicated that peer popularity had a negative correlation with teacher rated internalising and externalising problems in second and fifth grade children. However, it may be that children with externalising problems affiliate with one another in school (Cairns, Cairns, Neckerman, Gest & Gariepy, 1987) and that they receive positive feedback from a small clique of peers who act as motivators and supporters of behaviours such as fighting, teasing, and destroying (Kaplan, 1975).

Self-report measures, like those used in the present study (although the Stories Task was semi-projective), may have the limitation of provoking socially desirable responses. Another reason why externalisers score higher on these measures may be that they are more prone to giving socially desirable answers. However, it is not clear why children in the other two problem groups did not show this tendency.

Some researchers have shown a developmental trend in the way children evaluate their own ability (see Stipek and MacIver, 1989 for a review). For example, Stipek (1981) found that as children progressed through school years, their ratings of their own ability corresponded better with teachers's rating of their (the children's) ability. Children in the Kindergarten and the first year of primary school in their study tended

to overrate their own ability more than the second and third graders. Children in the present study were nearing the completion of the first year of their primary school. Is it possible that children with externalising problems were operating at a developmentally lower level in evaluating their own competence, social acceptance and social relationships as compared with other children. Evidence from the present study is too limited to address such a question, but is a possible line for future research.

Another possible explanation for a positive view of the self and of relationships among externalisers comes from assertions made by Kaplan (1978) who suggested a tendency for a self-serving bias in the thinking of children who show externalising problems. However, as argued for children with internalising problems, to confirm self-serving bias as a possible explanation, it would be important to demonstrate that these children were in fact overestimating their self competence and the supportiveness in their relationships. That is to say, it would be important to find out if the externalisers are actually as competent as they presented themselves to be, or whether they present an exaggerated picture of their competence. Similarly, it would be important to explore whether they really share supportive relationships with their mothers, teachers and peers, or only paint a positive picture?

As mentioned earlier, the verbal IQ of the children with externalising problems was significantly lower than that of the non- problem group and did not differ significantly from the other problem groups. However, the externalising problem children had a similar view of their cognitive competence to that of the non-problem children, and claimed higher cognitive competence than their counterparts with internalising and multiple problems. This claim on the part of the externalisers could to some extent be

taken as evidence for their tendency to exaggerate their own competence or to deny their true feelings/ knowledge of self competence.

Similarly, the teachers' reports of the children's behavioural problems to some extent provide an external index of the kind of relationship they may be sharing with their teachers. The teachers selected the externalisers for showing behaviours such as poor concentration, disobedience, being difficult to manage, interfering with others' work, and being destructive. In the classroom, it is likely that these children were receiving relatively more negative feedback from their teachers in their daily interactions with them than the children who were considered by the teachers as not showing such problems, or who were selected for being withdrawn or sensitive. Some support for this view comes from the findings of Siperstein and Goding (1985) who found that teachers behaved differently with children who showed learning disabilities (LD) and had low peer group status as compared with those who did not show these problems in ordinary classrooms. Specifically, teachers responded with greater frequency of corrective behaviour and used more unsupportive verbal and negative nonverbal behaviour with LD children than with the non-LD children. Learning disabilities have been shown to go hand in hand with problems such as hyperactivity and aggressiveness (Bryan and McGrady, 1972). Therefore, it seems reasonable to argue that the children in the present study with externalising problems probably received more negative feedback from their teachers than their non-problem counterparts, and consequently shared a relatively unsupportive relationship with their teachers. However, these children cast a relatively good picture of their relationships with their teachers.

Similarly, previous research indicates that parents of aggressive children often exhibit poor child rearing practices. They show rejection, fail to supervise adequately (Wilson, 1980), discipline punitively, and communicate poorly (Patterson, 1982) with their children. Observational studies of interaction between mothers and their aggressive children have shown that they engage in more frequent, longer, and more intensely aversive interactions than do nonaggressive mother-child dyads (Delfinin, Bernal, & Rose, 1976; and Patterson, 1976). These findings suggest a greater possibility of sharing a poor relationship with their mothers on the part of children who showed externalising problems in the present study as compared to their non-problem peers. However, the stories they told us about the relationship with their mothers were as positive as those of the non-problem children. Under the circumstances, there seems to be a possibility that these children have a tendency to overestimate the supportiveness of their relationships.

What might be the possible reasons for the tendency on the part of the externalisers to overestimate or deny their real competence, social acceptance and the supportiveness of their relationships? It may be that denying realities helps these children to mask their underlying feelings of inadequacy and self- doubt, or that selectively overestimating their own competence, acceptance and supportiveness of relationship creates a defence against realities that are too painful for them to acknowledge. In the clinical literature, unrealistically high self-views and feelings of grandiosity are associated with disorders of self and are considered critical in determining the presence of Narcissitic and Borderline Personality Disorders (DSM-III/R, American Psychiatric Association, 1987). It may be that children with externalising problems have or are heading towards developing some elements of such self-disorders.

However, another more plausible possibility which seems to match with their behavioural reports is that they are untruthful or dishonest more generally and specifically where they have to admit their weaknesses. More definite answers to such possibilities might come from more intensive work at the individual level with these children and from observational research.

9.6.3 Some General Points

Two general points that emerged from the findings of the present study deserve further discussion- implications for assessment of emotional and behavioural problems in future research; and implications for assessment of social cognitions in children with emotional and behavioural problems.

9.6.3.1 Implications for assessment of emotional and behavioural problems in children

One finding of the present study was that children with multiple problems were similar to children with internalising problems, that is, they had a relatively negative view of themselves and their relationships with their mothers, teachers and peers. In the existing social cognition literature on children with emotional and behavioural problems, it is not uncommon to select children only on the basis of one specific problem to explore their social cognitions. For example, the studies mentioned earlier on depressed children (Asarnow et al., 1987; 1988 and Kaslow et al., 1984), paid no attention to the other problems that these children might have been experiencing along with depression. Coexistence of other problems with depression has been reported. For example, Renouf and Harter (1990) in their study with young adolecents found that

80% of them (N=173) thought that depression for them was a blend of sadness and anger, and that their anger was both self and other directed.

Similarly, in many studies carried out on social-cognitive biases in aggressive children (e.g., Dodge, 1980; 1986 and Dodge and Frame, 1982), Dodge and his colleagues have consistently shown that aggressive children selectively show hostile attributions as compared with their non-aggressive peers. But no attention was paid to these children's status on internalising problems. Before beginning to establish the nature of biases in such children's social cognitions, it will be important to systematically assess a wider range of their emotional and behavioural problems. Consistent with these views Landau and Milich (1985) argued that valuable information is lost about aggressive children if their status on the withdrawal dimension is not simultaneously assessed. Similarly, Achenbach and McConaughy (1987) asserted: "To avoid biases arising from an overly narrow focus on particular complaints, assessment should sample a broad range of features relevant to the child's age and sex. This may reveal, for example, that a complaint such as "hyperactivity" or "fighting" is only one aspect of a larger pattern that includes depression, withdrawal, or lack of social skills. Assessment procedures designed to focus on a particular aspect of functioning may accurately tap that aspect, but their insensitivity to other aspects of functioning may lead to premature conclusions about a child's needs" (p. 15-16). The use of a two-step strategy - screening for a range of problems using quick and standardised measures, followed by a diagnostic assessment to pin point the problems, may go some way in selecting more reliable samples, to enable systematic query into social cognitions of children with emotional and behavioural problems.

9.6.3.2 Implications for assessment of social cognitions in children with emotional and behavioural problems

A final point which is important in making progress on social cognitions in children with emotional and behavioural problems emerges from the intercorrelations among measures in the present study. Although, it is encouraging to find that the results of the measures in the present study were consistent, the low correlations among them and inefficiency of several items have implications for future construction of the social cognition measures. In order to confirm biases in children's thinking, the social cognition measures will need to be improved on the lines suggested earlier (see p. 306, this thesis). If this is done, the information on children's social cognitions may provide a fruitful basis for further research and for cognitive-educational interventions.

Overview

The aim of this research was to explore whether and how children with emotional and behavioural problems differ in the way they think about themselves and their relationships with their mothers, teachers and peers from children who do not show such problems. The rationale for expecting these differences came from the assumption that social cognitions are meaningfully linked with social behaviour. The rationale for exploring these differences came from the belief that information on children's social cognitions may be useful in planning school-based interventions for children who show emotional and behavioural problems.

To be able to select children with sufficient accuracy, the use of a standardised instrument to select children was considered important. Two studies were carried out to examine the suitability of the existing instruments for identifying emotional and behavioural problems. One of these instruments was used for selecting children who demonstrated emotional and behavioural problems and for selecting a comparison group. Social cognitions were examined in a third study. There were several major findings:

1. The Preschool Behaviour Checklist (PBCL) designed for use in preschools was found to be suitable for identifying emotional and behavioural problems shown by children in the first year of primary school in London and Ludhiana (India). The two studies carried out to assess the suitability of the PBCL provided evidence for its convergence with another, widely used scale (the TRF) and with the teachers' view of children's emotional and behavioural problems. The similarity of the findings from the

two studies suggested that the teachers in the first year of primary school classrooms in Ludhiana and London shared a view regarding which behaviours in children are a source of concern to them and provided support the validity of the instruments used in the study.

2. The findings from social cognition measures indicated that children who presented emotional and behavioural problems in the school classroom thought less positively about themselves and their relationships with their mothers, teachers and peers when compared with the children who did not show the problems. These findings were consistent with the hypothesis that the way children think about themselves and their social world is coherent with the way they behave. The findings also provide evidence for the criterion validity of the social cognition measures used in the study.

3. When the differences were explored for subgroups of children who presented different types of emotional and behavioural problems, it was found that the children with internalising and multiple problems thought less positively about themselves and their social relationships. In contrast, children with externalising problems were as positive as the children who did not show any emotional and behavioural problems. The findings were discussed in terms of a self-deprecating tendency among children who presented internalising problems and a self-serving bias in children with externalising problems. It seemed equally probable that instead of showing any social-cognitive biases, children with internalising problems were simply being more honest or truthful in their reports of their social cognitions and the children with externalising problems were being dishonest. More research will be necessary to make progress on the issue of the nature of social-cognitive biases shown by children with emotional and behavioural problems.

4. Many items in the instruments used in the present study were found to have low reliability in terms of differentiating the groups and subgroups of children with emotional and behavioural problems. In order to make progress on understanding children's social-cognitive biases, the instruments will need to be improved. If this is done, the resulting information may prove useful in planning cognitive-educational interventions for children.

5. The findings of the study also clearly indicated the need to pay attention to both internalising and externalising elements, and to their interrelationship in the future assessment of children's emotional and behavioural problems.

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APPENDICES

Appendix 1 : The Instruments Used In Study One

Appendix 1.1: The Child Behaviour Questionnaire

Appendix 1.2: The Preschool Behaviour Checklist

Appendix 1.3: The Teacher Report Form

Appendix 1.4: The Original PBCL Factors Found by McGuire & Richman (1986)

Appendix 1.5: The Original TRF Factors Found by Achenbach & Edelbrock (1986)

Appendix 1.6: The CBQ Factors Found by McGee et al. (1985)

Appendix 1.7: The PBCL Factors Found by Jackson (1989)

Appendix 1.1: The Child Behaviour Questionnaire

Child's Initials:

Name Of The School:

Below are a series of descriptions of behaviour often shown by children. After each statement, there are three columns: 'Doesn't Apply', 'Applies Somewhat', and 'Certainly Applies'. If the child definitely shows the behaviour described by the statement, place a cross in the space under 'Certainly Applies'. If the child shows the behaviour described by the statement but to a lesser degree or less often, place a cross in the space under 'Applies Somewhat'. If as far as you are aware, the child does not show the behaviour place a cross in the box under 'Doesn't Apply'. Please put <u>one</u> cross against <u>each</u> statement.

Statement	Doesn't Applies	Applies Somewhat	Certainly Applies
1. Very restless. Often running about or jumping up and down. Hardly ever still.			
2. Truants from school.			
3. Squirmy, fidgety child.			
4. Often destroys own or others' belongings			
5. Frequently fights with other children			
6. Not much liked by other children			
7. Often worried, worries about many things			
8. Tends to do things on his own- rather solitary			
9. Irritable. Is quick to "fly of the handle"			
10. Often appears miserable, unhappy, tearful or distressed			
11. Has twitches, mannerisms, or tics of the face or body			

12. Frequently sucks thumb or fingers	____	____	____
13. Frequently bites nails or fingers	____	____	____
14. Tends to be absent from school for trivial reasons	____	____	____
15. Is often disobedient	____	____	____
16. Has poor concentration or short attention span	____	____	____
17. Tends to be fearful or afraid of new things or new situations	____	____	____
18. Fussy or over-particular child	____	____	____
19. Often tells lies	____	____	____
20. Has stolen things on one or more occasions	____	____	____
21. Has wet or soiled self at school this year	____	____	____
22. Often complains of pains or aches	____	____	____
23. Has had tears on arrival at school or has refused to come into the building this year	____	____	____
24. Has a stutter or stammer	____	____	____
25. Has other speech difficulty	____	____	____
26. Bullies other children	____	____	____

Are there any other problems of behaviour?_____

_____

_____

Please be sure you have answered all items. Thank you.

ARTICLE REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

ARTICLE REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

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ARTICLE REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Appendix 1.4 Original Factor Loadings[1] Of The Preschool Behaviour Checklist Found By McGuire & Richman (1986).

Items[2]	1	2	3	4	5	6
1.Activity	0.70					
2.Not liked by peers	0.49					
3.Wets						0.87
4.Soils						0.65
5.Poor concentration	0.60			0.37		
6.Difficult to manage	0.73					
7.Demands Attention		0.58				
8.Unclear speach	0.39			0.43		
9.Reluctant to speek				0.36	0.77	
10.Tantrums	0.42	0.38				
11.Withdrawn from peers				0.55		
12.Whines/Complains		0.53	0.42			
13.Sensitive, easily upset	0.69					
14.Bites,Kicks,Fights	0.33		0.72			
15.Wanders aimlessly				0.55		
16.Interferes in play	0.58		0.65			
17.Miserable		0.49				
18.Taunts,Teases[3]	-	-	-	-	--	
19.Withdrawn from staff					0.66	
20.Destroys	0.69		0.36			
21.Fearful		0.38				
22.Habits[4]	-	-	-	-	--	

1. Loadings less than 0.30 are not included in the table.
2. Item contents are abridged.
3. This item was not included in the analysis. Reason not given.
4. This item did not load on any of the factors.

Appendix 1.5: The Original TRF Factors Found In Achenbach and Edelbrock (1986) For 6-11 Year Old Boys And Girls

For Boys

Internalizing Scales

I. Anxious

108. Fears mistakes	.72
32. Needs to be Perfect	.70
31. Fears own impulses	.66
106. Anxious to please	.63
112. Worrying	.62
50. Anxious	.59
71. Self-conscious	.55
52. Feels guilty	.49
81. Feels hurt when criticized	.48
35. Feels worthless	.47
47. Overconforms	.40
99. Too neat	.39
11. Clings to adults	.35
75. Shy, timid	.35
69. Secretive	.31
Eigen value	5.56

II. Social Withdrawal

111. Withdrawn	.70
42. Likes to be alone	.57
69. Secretive	.52
65. Won't talk	.49
103. Sad	.49
75. Shy,timid	.47
102. Slow, underactive	.42
60. Apathetic	.37
80. Stares blankly	.37
86. Stubborn	.34
88. Sulks	.31
Eigen value	4.65

Mixed Scales

III. Unpopular

48. Unliked	.58
38. Is teased	.56
12. Lonely	.52
1. Acts too young	.50
64. Prefers young kids	.45
25. Poor peer relations	.42
33. Feels unloved	.40
35. Feels worthless	.39
11. Clings to Adults	.38
34. Feels persecuted	.38
Eigen value	3.55

IV. Self-Destructive

18. Harms self	.72
58. Picking	.61
44. Nail biting	.52
84. Strange behavior	.50
91. Suicidal talk	.47
20. Destroys own things	.44
110. Unclean	.40
36. Accident prone	.39
62. Clumsy	.37
21. Destroys others' things	.35
52. Feels guilty	.35
29. Fears	.33
28. Eats nonfood	.32
Eigen value	4.15

V. Obsessive-Compulsive

85. Strange ideas	.64
66. Compulsions	.59
9. Obsessions	.51
2. Hums	.39
28. Eats nonfood	.37
84. Strange behavior	.37
46. Nervous movements	.36
13. Confused	.35
80. Stares blankly	.35
Eigen value	3.35

Externalizing Scales

VI. Inattentive

61. Poor schoolwork	.77
78. Inattentive	.77
8. Can't concentrate	.76
4. Fails to finish things	.73
100. Doesn't carry out tasks	.72
17. Daydreams	.66
22. Can't follow directions	.66
92. Underachieving	.61
49. Difficulty learning	.60
60. Apathetic	.59
13. Confused	.55
80. Stares blankly	.52
72. Messy work	.48
102. Underactive	.46
1. Acts young	.40
73. Irresponsible	.39
54. Overtired	.54
15. Fidgets	.33
62. Clumsy	.33
2. Hums	.31
24. Disturbs others	.31
Eigen value	8.14

VII. Nervous-Overactive

45. Nervous	.71
46. Nervous movements	.62
15. Fidgets	.46
10. Hyperactive	.44
44. Nail biting	.41
72. Messy work	.38
83. Hording	.33
Eigen value	3.27

VII. Aggressive

23. Disobedient	.79
3. Argues	.77
16. Cruelty	.77
95. Temper tantrums	.77
6. Defiant	.76
57. Attacks people	.75
67. Disrupts class	.73
97. Threatens	.73
37. Fights	.70
76. Explosive	.70
24. Disturbs others	.69
86. Stubborn	.69
94. Teases	.67
21. Destroys others things	.65
104. Loud	.65
90. Swearing	.64
25. Poor peer relations	.63
74. Shows off	.63
77. Easily frustrated	.63
87. Moody	.63
26. Lacks guilt	.63
53. Talks out of turn	.60
7. Bragging	.58
68. Screams	.58
27. Jealous	.57
19. Demands attention	.56
73. Acts irresponsibly	.56
34. Feels persecuted	.55
39. Bad friends	.55
41. Impulsive	.41
88. Sulks	.55
89. Suspicious	.53
43. Lying, cheating	.52
93. Talks too much	.52
20. Destroys own things	.50
48. Not liked	.43
82. Steals	.41
15. Fidgets	.40
Eigen value	17.35

Girls Aged 6-11

I. *Internalizing Scales*

108. Fears own mistakes	.73
106. Anxious to please	.71
32. Needs to be perfect	.67
31. Fears own impulses	.66
47. Overconforms	.65
50. Anxious	.65
112. Worrying	.58
71. Self-conscious	.52
81. Feels hurt when criticized	.51
45. Nervous	.41
52. Feels guilty	.40
35. Feels worthless	.38
103. Sad	.36
11. Clings to Adults	.36
99. Too neat	.36
75. Shy, timid	.34
29. Fears	.33
Eigen value	6.00

II. *Social Withdrawal*

69. Secretive	.73
111. Withdrawn	.64
42. Likes to be alone	.64
65. Won't talk	.63
75. Shy, timid	.55
102. Slow, underactive	.45
80. Stares blankly	.39
60. Apathetic	.39
103. Sad	.36
17. Daydreams	.31
Eigen value	4.26

Mixed Scales

III. *Depressed*

14. Cries	.64
12. Lonely	.60
33. Feels unloved	.59
35. Feels worthless	.53
109. Whining	.50
34. Feels persecuted	.47
103. Sad	.46
88. Sulks	.40
27. Jealous	.38
81. Feels hurt when criticized	.38
36. Accident prone	.38
89. Suspicious	.36
112. Worrying	.33
87. Moody	.33
11. Clings to adults	.31
Eigen value	4.47

IV. *Unpopular*

48. Unliked	.65
38. Is teased	.57
25. Poor peer relations	.54
110. Unclean appearance	.44
34. Feels persecuted	.42
37. Fights	.37
Eigen value	2.96

V. *Self-Destructive*

28. Eats nonfood	.59
58. Picking	.55
20. Destroys own things	.47
83. Hoarding	.41
91. Suicidal talk	.40
2. Hums	.38
18. Harms self	.38
56d. Eye problems	.32
Eigen value	2.63

Externalizing Scales

VI. *Inattentive*

61. Poor schoolwork	.77
78. Inattentive	.75
8. Can't concentrate	.74
22. Can't follow directions	.71
4. Fails to finish things	.70
49. Difficulty learning	.69
100. Doesn't carry out tasks	.65
60. Apathetic	.62
13. Confused	.60
72. Messy Work	.59
92. Underachieving	.57
17. Daydreams	.56
80. Stares blankly	.46
1. Acts too young	.38
15. Fidgets	.36
73. Irresponsible	.35
10. Hyperactive	.35
54. Overtired	.32
93. Talks too much	.31
19. Demands attention	.30
Eigen value	7.96

VII. *Nervous -Overactive*

10. Hyperactive	.62
15. Fidgets	.62
45. Nervous	.52
46. Nervous movements	.48
93. Talks too much	.44
41. Impulsive	.41
2. Hums	.34
Eigen value	3.17

VIII. *Aggressive*

23. Disobedient at school	.82
67. Disrupts class	.82
6. Defiant	.80
16. Cruelty	.80
76. Explosive	.79
95. Temper tantrums	.77
57. Attacks people	.77
3. Argues	.75
26. Lacks guilt	.73
97. Threatens	.72
37. Fights	.72
86. Stubborn	.70
24. Disturbs others	.70
104. Loud	.67
77. Easily frustrated	.67
53. Talks out of turn	.66
94. Teases	.65
39. Bad friends	.63
41. Impulsive	.63
21. Destroys others' things	.62
74. Shows off	.61
87. Moody	.61
68. Screams	.61
43. Lying, cheating	.57
88. Sulks	.57
25. Poor peer relations	.55
90. Swearing	.90
19. Demands attention	.53
27. Jealous	.53
7. Bragging	.52
93. Talks too much	.49
20. Destroys own things	.45
89. Suspicious	.45
34. Feels persecuted	.43
2. Hums	.43
Eigen value	17.20

Appendix 1.6: Factor Loadings Of The CBQ Found by McGee et al. (1985)

Item	1	2	3	4	5	6
Fights	.80					
Bullies	.68					
Irritable	.63					
Disobedient	.58		.43			
Destroys	.54			.36		
Not liked	.48	.38				
Worries		.74				
Fearful		.60				
Unhappy		.59				
Fussy		.49				
Solitary		.45				
Fidgets			.77			
Restless	.39		.72			
Concentration			.56			
Lies	.50			.64		
Steals				.60		
Twitches					.54	
Stutters					.51	
Sucks thumb						.54
Bites nails						.50
Aches / pains		.33				
Absent						
Speech Dist.						

Appendix 1.7: PBCL Factor Loadings[1] Found By Jackson (1989).

Items	1	2	3	4	5	6
1.Activity				0.72		
2.Not liked by peers	0.49	0.41				
3.Wets					0.80	
4.Soils						0.78
5.Poor concentration	0.35			0.72		
6.Difficult to manage	0.74					
7.Demands Attention	0.45		0.49	0.35		
8.Unclear speach		0.35			0.53	
9.Reluctant to speek		0.86				
10.Tantrums	0.47		0.34			0.34
11.Withdrawn from peers		0.72				
12.Whines/Complains	0.40		0.62			
13.Sensitive, easily upset			0.79			
14.Bites,Kicks,Fights	0.80					
15.Wanders aimlessly		0.34		0.69		
16.Interferes in play	0.83					
17.Miserable			0.75			
18.Taunts,Teases	0.76					
19.Withdrawn from staff		0.82				
20.Destroys	0.75					
21.Fearful		0.49	0.53			
22.Habits			0.30			-0.34

1. Loadings less than 0.30 are not included in the table.

Appendix 2: Letters To Teachers In London For Study One.

Appendix 2.1: Letter to headteachers

Appendix 2.2: Letter to reception classteachers inviting them to participate

Appendix 2.3: Reply form completed by London teachers

Appendix 2.4: Feedback sent to teachers in London

Appendix 2.5: Instructions for completing the first set of the assessments

Appendix 2.6: Instructions for completing the second set of assessments

Appendix 2.1: Letter to Headteachers of Schools Who Were Invited To Participate In Study One.

Dear Headteacher,

Assessing Emotional And Behavioural Development In Reception Class Children

The enclosed letter provides details for study of children's emotional and behavioural development we are carrying out in collaboration with reception class teachers this term.

We hope that you will be willing to allow your reception class teacher(s) to participate in this study. If so, could you kindly pass the letter on to the teachers concerned so that they can contact us if they wish to take part.

With many thanks,

Yours Sincerely,

Appendix 2.2: Letter to Reception Class Teachers Inviting Them To Participate In Study One.

Dear Colleague,

Assessing Emotional And Behavioural Development In Reception Class Children

Although a great deal of attention is being paid to academic assessment of primary school children, there is currently no equivalent effort toward assessing their emotional and behavioural development.

We believe that such assessments would be useful in several ways. For one thing, the current lack of any agreed format is itself a source of confusion, while an effective instrument would assist communication among teachers, parents and others concerned with children's special needs. For another, there is growing evidence that emotional and behavioural problems are associated with poor academic performance. Once academic assessments at seven becomes established, a method which enables "early warning" of such difficulties seems likely to be useful for all concerned.

We are aiming to develop an instrument which fulfills this role in relation to primary school reception classes. A major objective is to produce an instrument which is appropriate for this context and we are seeking to involve reception class teachers in the development process right from the outset. The first step is to evaluate some rating scales which have been used in other contexts. We are hoping that you will take part in this study by filling in some scales for children in your class and by giving us your view of their suitability.

WHAT WE ARE ASKING YOU TO DO	WHAT WE WILL DO
1. Complete a rating scale for each of ten children in your class (5 to 10 minutes per child).	1. Provide feedback on the scores of individual children.
2. Complete a second, different, rating scale for the same children two weeks later (5 to 10 minutes per child).	2. Send you a summary of the overall findings of the study.

NB : Confidentiality will be maintained by using the children's initials only.

If you would like to participate in this study, please complete and return the attached details at your earliest convenience.

Yours Sincerely,

Appendix 2.3: Reply Form Completed By London Teachers

Reply Form : To be completed by reception class teachers

I would like to participate in the study titled, 'Assessment Of Emotional and Behavioural Development In Reception Class Children'.

1. YOUR NAME _____

2. NAME OF SCHOOL _____

3. SCHOOL ADDRESS _____

_____

4. TELEPHONE NO. _____

5. Leaving out any children who have joined your class this term, please list the initials of FIRST / LAST 5 BOYS and 5 GIRLS on your class register.

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. Are you concerned about behaviour of any of the above children? (Please write initials of the child(ren) in appropriate column)

Definitely	Possibly	Not Really
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Appendix 2.4: Feedback Sent To Teachers In London During Study One

Re : Feedback on scores of children regarding assessment of emotional and behavioural

Dear,

Thank you for completing the PBCLs/ CBQs and the TRFs. Your suggestions will help us to develop an appropriate instrument for assessing the special emotional and behavioural needs of reception class children.

We are enclosing the feedback on scores of all the children. Remarks on scores of individual children are given wherever necessary. The authors of PBCL/ CBQ and the TRF have given cut-off points which are meant to differentiate between behaviours that warrant further investigation for possible problems and those behaviours which do not warrant such concern. However, these cut-off points need to be interpreted cautiously until such time as the research instruments have been fully validated.

We hope you will find this information useful. If you have any comments on the feedback, we will be happy to hear from you. We will send you a summary of our findings when we finish with our data analyses. Thank you once again for all your assistance.

Yours Sincerely,

Appendix 2.5: Letter of Instructions For Completing The First Set Of The Assessments

Note : The letter given below is that for completing the PBCLs. Similar letters were sent to teachers who completed the CBQs and the TRFs in the first round.

Dear

Assessing Emotional And Behavioural Development In Reception Class Children

Thank you for agreeing to participate in our research project. Enclosed are ten copies of your the Preschool Behaviour Checklist (PBCL) and an evaluation questionnaire. Below are some instructions which will help you in completing them:

What To Do

1. Over the next week
Please take some time to familiarise yourself with the PBCL itself. That is, read through the items and then start to observe your class with these in mind. Please do not fill in any PBCLs at this stage.

2. Filling in the PBCl
Please fill in the PBCLs for the ten children on your class registers (whose initials you have already sent to us). Think about the child's behaviour, reactions to pupils and situations in the past two months and base your ratings on actual behaviour shown. Please work through each item without leaving any out.

3*.Completing the evaluation questionnaire
Please fill in the evaluation questionnaire as soon as possible after completing the PBCLs, whilst impressions are still fresh in your mind. Then return all the forms to us in the envelope provided.

Please return the completed PBCLs and questionnaire within 2 to 3 weeks.

4. What we will do

We will send you the next set of forms within a week of receiving this set. The second set involves a similar task, except that the questionnaires are different. After that, we will send you feedback on children's behaviour and our findings.

NB : It is important that the same teacher completes all the materials in this study.

Thank You,

Your Sincerely,

* See Jackson (1989) for report on evaluation questionnaire

Appendix 2.6: Letter Of Instructions For Completing The Second Set Of Assessments

Note : The letter given below is for completing the TRF in the second order. Similar letters were sent to teachers who completed the other scales in the second order.

Dear

Assessing Emotional And Behavioural Development In Reception Class Children

Thank you for returning the completed set of questionnaires. I am especially grateful for your thoughtful comments on the suitability of the checklist. I am enclosing ten copies of the Teacher Report Form (TRF) which has been developed for use with children in the United States. It has similar objectives as the PBCL. I am also enclosing an evaluation questionnaire for the TRF. I am repeating the procedure for your convenience.

What To Do

1. Over the next week
   Please take some time to familarise yourself with the TRF itself. That is, read through the items and then observe the same ten children with these behaviours in mind.

2. Filling in the TRFs
   Please work through each item of the TRF based on your ratings of actual behaviours shown by the child in the last two months. Please complete the TRF for the same ten children.

3. Completing the evaluation Questionnaire
   Please complete the evaluation questionnaire as soon as possible after completing the TRFs whilst impressions are still fresh in your mind. Then return the forms to us in the enclosed envelope.

4. What we will do
   We will send you the feedback on scores of individual children soon after receiving this set of questionnaires and a summary of the findings as soon as we compile the results.

NB : Please return the completed set of questionnaires within 2-3 weeks.

Thank you very much for your cooperation and the time you spared inspite of your busy schedule.

Yours Sincerely,

Appendix 3: CBQ, PBCL & TRF Analyses Regarding Order Effects

Differences In Mean Scores of CBQ, PBCL & TRF When Completed In First Or Second Order.

Measure	Order	N	Mean (SD)	F Value (df)
CBQ	First	110	7.66 (6.60)	3.5ns
	Second	110	5.98 (5.69)	(1,208)
PBCL	First	160	4.68 (4.83)	2.8ns
	Second	190	5.60 (5.14)	(1,348)
TRF	First (with PBCL)	190	22.89 23.58	2.03ns
	Second (with PBCL)	150	16.58 19.20	(3,532)
	First (with CBQ)	140	21.98 24.48	
	Second (with CBQ)	70	20.15 19.88	

Appendix - 4

The Preschool Behaviour Checklist (McGuire and Richman, 1988): Retranslated from Panjabi to English To Check Correspondence Of Meanings With The Original English Version.

1.

a. Very active, hardly sits for more than five minutes, running around all the time.

b. Very active, does not sit even when needed.

c. Active, sits when required.

d. Not active enough, lazy.

2.

a. Other children like him

b. some of the children don't like him

c. Most of the children don't like him.

3.

a. Never wets during the day (less than once a week).

b. Wets during the day once or twice a week.

c. Wets during the day, three or more times.

4.

a. Has attained bowel training, never spoils clothes.

b. Sometimes spoils clothes (once or twice a week).

c. Spoils clothes thrice a week.

5.

a. Never concentrates on any work for more than a few minutes.

b. Concentration fluctuates, sometimes concentrates but not at other times, finds it difficult to concentrate

c. Is generally able to concentrate for ten or more minutes.

6.

a. Very difficult to control, problems (e.g. disobedient interrupts other's work) usually every day.

b. Sometimes disobedient, interrupts, difficult to handle.

c. Easy to manage and control.

7.

a. Rarely demands too much attention.

b. Sometimes demands more attention, but is able to study or play on his/her own.

c. Demands attention frequently, (e.g. usually needs help, follows teacher around mostly).

8.

a. Stutters, stammers or his/her speech is not very clear.

b. Sometimes speech is not clear.

c. Speech is clear and easy to understand.

9.

a. Speaks frankly with teacher/ children.

b. Sometimes shows reluctance to speak to teachers/ children.

c. Very reluctant to speak to teachers/ children.

10.

a. Does not have temper tantrums.

b. Sometimes has temper tantrums, but last for few minutes.

c. Usually has tantrums, kicks becomes out of control.

11.

a. Often plays with other children.

b. Sometimes reluctant to play with other children, but will join them sometimes.

c. Rarely or never plays with other children.

12.

a. Whines, complains to teachers a lot.

b. Sometimes complains, whines but not every day.

c. Rarely or never complains or whines.

13.

a. Very sensitive, gets upset easily over minor things (e.g. falling, breaking things, stories, change in routine).

b. Sometimes gets very upset over little things.

c. Not very sensitive, does not get upset easily.

14.

a. Rarely fights with other children, rarely bites or kicks them.

b. Sometimes fights with other children or bites or kicks them.

c. Frequently or daily (with any provoking situation) bites or kicks other children.

15.

a. In the class, spends most of the time at staring or wandering without any aim.

b. Spends sometime staring and wandering.

c. Usually doing his/ her work, rarely stares or wanders aimlessly.

16.

a. Always interferes with other children's work, e.g. interrupts others' games, tries to boss others.

Sometimes interferes with other children work.

Rarely interferes with the work of other children.

17.

Rarely cries or seems sad, except for sometimes (e.g. when tired or sick).

Sometimes seems sad for long periods.

Usually, most of the time seems sad or unhappy for long periods.

18.

Frequently teases, taunts and shows ill will to other children.

Sometimes teases or shows spite.

Rarely or never teases or shows ill will.

19.

Is very emotionally withdrawn from teachers.

Sometimes withdrawn from teachers.

Frank or sociable with teachers.

20.

Rarely destroys any equipment.

Sometimes destroys (e.g. throwing things, breaking and banging things).

Frequently, Intentionally destroys

21.

Very fearful, his face shows very clear signs of fear.

Somewhat fearful, some mild fears or one or two marked fears.

Hardly ever afraid, only mild fears if at all.

22.

Please rate each habit as follows

0	Never
1	Sometimes or for short periods
2	Mostly or for long periods

Rocking.....
Thumb sucking.....
Bottle sucking.....
Nipple sucking.....
Hair pulling & sucking....
Head banging.....
Others.....

23.

Is there any thing else, you would like to say about the child's behaviour ?

Appendix 5: Revised PBCL Used In Study Two

ਮੁੰਡਿਆਂ ਵਾਸਤੇ
For Boys

ਬੱਚਿਆਂ ਦੇ ਵਤੀਰੇ ਸਬੰਧੀ ਸੂਚੀ

Child Behaviour Checklist

ਰੋਲ ਨੰਬਰ **Roll No.....** ਸੈਕਸ਼ਨ **Section..... .....** ਜਨਮ ਮਿਤੀ **Date of birth .. ..**

ਇਸ ਬੱਚੇ ਨੂੰ ਤੁਸੀਂ ਕਿੰਨੇ ਸਮੇਂ ਤੋਂ ਜਾਣਦੇ ਹੋ ?
For how long have you known this child ? ..... ਮਹੀਨੇ **Months**

ਹੇਠਾਂ ਬੱਚਿਆਂ ਦੇ ਆਮ ਵਤੀਰੇ ਸਬੰਧੀ ਇਕ ਸੂਚੀ ਦਿੱਤੀ ਗਈ ਹੈ । ਸੂਚੀ ਦੇ ਹਰ ਮੱਦ ਵਿਚ ਤਿੰਨ ਤਰ੍ਹਾਂ ਦੇ ਵਤੀਰਿਆਂ ਦਾ ਵਰਨਣ ਕੀਤਾ ਗਿਆ ਹੈ। ਬੱਚੇ ਦਾ ਵਤੀਰਾ ਦੇਖਦੇ ਹੋਏ ਤਿੰਨਾਂ ਵਿਚੋਂ ਇਕ ਵਰਨਣ ਚੁਣੋ ਜੋ ਬੱਚੇ ਦੇ ਵਤੀਰੇ ਲਈ ਹਾਲ ਦੀ ਘੜੀ ਢੁੱਕਵਾਂ ਹੋਵੇ । ਚੁਣੇ ਹੋਏ ਵਰਨਣ ਤੇ ਟਿਕ (✓) ਦਾ ਨਿਸ਼ਾਨ ਲਗਾਓ । ਜ ਚੋਣ ਕਰਨ ਵਿਚ ਕੋਈ ਸੰਦੇਹ ਹੋਵੇ ਤਾਂ ਉਹ ਵਰਨਣ ਚੁਣੋ ਜੋ ਬੱਚੇ ਦੇ ਵਤੀਰੇ ਨਾਲ ਵਧੇਰੇ ਮਿਲਦਾ ਜੁਲਦਾ ਹੋਵੇ ।

Below is a list of behaviours often shown by young children. For each item, please put a tick (✓) opposite the description which best fits the child at the present time. If in doubt, choose the alternative which you think is most often seen.

1.		1	
(ੳ)	ਲੱਤ ਤੋਂ ਵੱਧ ਫੁਰਤੀਲਾ, ਕਦੇ ਵੀ ਪੰਜ ਮਿੰਟ ਤੋਂ ਵੱਧ ਟਿੱਕ ਕੇ ਨਹੀਂ ਬੈਠਦਾ, ਹਰ ਵੇਲੇ ਦੌੜਦਾ ਭੱਜਦਾ ਰਹਿੰਦਾ ਹੈ । ☐	(a)	Too active hardly ever sits still for more than five minutes, always rusbing around. ☐
(ਅ)	ਕਾਫ਼ੀ ਫੁਰਤੀਲਾ ਹੈ, ਲੱਤ ਪੈਣ ਤੇ ਵੀ ਟਿਕ ਕੇ ਨਹੀਂ ਬੈਠ ਸਕਦਾ । ☐	(b)	Very active, not always able to sit still when necessary. ☐
(ੲ)	ਫੁਰਤੀਲਾ ਹੈ, ਪਰ ਲੱਤ ਪੈਣ ਤੇ ਟਿੱਕ ਕੇ ਬੈਠ ਜਾਂਦਾ ਹੈ । ☐	(c)	Not markedly active, usually sits still when necessary. ☐
(ਸ)	ਲੱਤੀਂਦੀ ਫੁਰਤੀ ਨਹੀਂ, ਸਗੋਂ ਸੁਸਤੀ ਵਲ ਝੁਕਾਅ ਹੈ । ☐	(d)	Not active enough, tends to be lethargic. ☐
2.		2	
(ੳ)	ਬਾਕੀ ਬੱਚੇ ਇਸ ਨੂੰ ਪਸੰਦ ਕਰਦੇ ਹਨ । ☐	(a)	Seems to be liked by other children. ☐
(ਅ)	ਕੁਝ ਬੱਚੇ ਇਸ ਨੂੰ ਪਸੰਦ ਨਹੀਂ ਕਰਦੇ । ☐	(b)	Not liked by some children. ☐
(ੲ)	ਵਧੇਰੇ ਬੱਚੇ ਇਸ ਨੂੰ ਪਸੰਦ ਨਹੀਂ ਕਰਦੇ । ☐	(c)	Most children seem not to like him. ☐
3.		3	
(ੳ)	ਦਿਨ ਵੇਲੇ ਕਦੇ ਵੀ ਵਿੱਚੇ ਪਿਸ਼ਾਬ ਨਹੀਂ ਕਰਦਾ (ਹਫਤੇ ਵਿਚ ਇਕ ਵਾਰ ਤੋਂ ਘੱਟ) । ☐	(a)	Never or rarely wets during the day (less than once a week). ☐
(ਅ)	ਦਿਨ ਵੇਲੇ ਹਫਤੇ ਵਿੱਚ ਇਕ ਜਾਂ ਦੋ ਵਾਰ ਵਿੱਚੇ ਪਿਸ਼ਾਬ ਕਰ ਦਿੰਦਾ ਹੈ । ☐	(b)	Wets during the day once or twice a week. ☐
(ੲ)	ਦਿਨ ਵੇਲੇ ਹਫਤੇ ਵਿਚ ਤਿੰਨ ਜਾਂ ਇਸ ਤੋਂ ਵੀ ਵੱਧ ਵੇਰਾਂ ਵਿੱਚੇ ਪਿਸ਼ਾਬ ਕਰਦਾ ਹੈ । ☐	(c)	Wets during the day three or more times a week. ☐
4.		4	
(ੳ)	ਟੱਟੀ ਆਉਣ ਤੇ ਦਸਦਾ ਹੈ, ਕਪੜੇ ਖਰਾਬ ਨਹੀਂ ਕਰਦਾ । ☐	(a)	Completely bowel trained, never dirties pants. ☐
(ਅ)	ਕਦੇ ਕਦੇ ਕਪੜੇ ਖਰਾਬ ਕਰਦਾ ਹੈ (ਹਫਤੇ ਵਿਚ ਇਹ ਦੋ ਵਾਰ । ☐	(b)	Occasionally soils upto once or twice a week. ☐
(ੲ)	ਹਫਤੇ ਵਿੱਚ ਤਿੰਨ ਜਾਂ ਇਸ ਤੋਂ ਵੱਧ ਵਾਰ ਕਪੜੇ ਖਰਾਬ ਕਰਦਾ ਹੈ । ☐	(c)	Soils pants three or more times a week. ☐
5.		5	
(ੳ)	ਕਦੇ ਵੀ ਕਿਸੇ ਵੀ ਕੰਮ ਵੱਲ ਕੁਝ ਮਿੰਟਾਂ ਤੋਂ ਵਧੇਰੇ ਧਿਆਨ ਨਹੀਂ ਦਿੰਦਾ । ☐	(a)	Hardly ever concentrates for more than a few minutes on any activity. ☐
(ਅ)	ਧਿਆਨ ਦੇਣ ਵਿਚ ਤਬਦੀਲੀ ਆਉਂਦੀ ਰਹਿੰਦੀ ਹੈ, ਕਦੇ ਘੱਟ ਕਦੇ ਵੱਧ ਧਿਆਨ ਦਿੰਦਾ ਹੈ, ਧਿਆਨ ਦੇਣ ਵਿਚ ਕਠਿਨਾਈ ਮਹਿਸੂਸ ਕਰਦਾ ਹੈ । ☐	(b)	Concentration varies, sometimes finds it difficult to concentrate. ☐
(ੲ)	ਪੂਰਾ ਧਿਆਨ ਦਿੰਦਾ ਹੈ, ਆਮ ਤੌਰ ਤੇ ਦਸ ਮਿੰਟ ਜਾਂ ਇਸ ਤੋਂ ਵੀ ਵੱਧ ਇਕ ਕੰਮ ਵਲ ਧਿਆਨ ਦਿੰਦਾ ਹੈ । ☐	(c)	Has good concentration, usually stays at work for ten minutes or more. ☐

6.

(ੳ) ਕਾਬੂ ਵਿਚ ਰਖਣਾ ਅਕਸਰ ਬਹੁਤ ਮੁਸ਼ਕਿਲ ਹੈ, ਹਰ ਵੇਲ ਹੀ ਕੋਈ ਨਾ ਕੋਈ ਸਮੱਸਿਆ ਖੜੀ ਕਰੀ ਰਖਦਾ ਹੈ (ਜਿਵੇਂ ਕਿ ਅੱਖੜਪੁਣਾ, ਕਹਿਣਾ ਨਾ ਮੰਨਣਾ, ਖੇਡ ਜਾਂ ਪੜ੍ਹਾਈ ਵਿਚ ਵਿਘਨ ਪਾਉਣਾ, ਆਦਿ)। ☐

(ਅ) ਕਦੇ ਕਦੇ ਕਹਿਣਾ ਨਹੀਂ ਮੰਨਦਾ, ਖੇਡ ਜਾ ਪੜ੍ਹਾਈ ਵਿਚ ਵਿਘਨ ਪਾਉਂਦਾ ਹੈ। ਵੱਸ ਵਿਚ ਨਹੀਂ ਆਉਂਦਾ। ☐

(ੲ) ਸਹਿਜੇ ਹੀ ਵੱਸ ਵਿਚ ਰਹਿਣ ਅਤੇ ਕਾਬੂ ਵਿਚ ਆਉਣ ਵਾਲਾ ਹੈ। ☐

6

(a) Frequently very difficult to manage or control; problems (e.g. defiant, disobedient or interrupts during group activities) almost every day. ☐

(b) Sometimes defiant, disobedient, interrupts during group time, or difficult to manage. ☐

(c) Easy to manage and control. ☐

7.

(ੳ) ਕਦੇ ਘੱਟ ਹੀ ਵਧੇਰੇ ਧਿਆਨ ਮੰਗਦਾ ਹੈ। ☐

(ਅ) ਕਦੇ ਕਦੇ ਬਹੁਤ ਧਿਆਨ ਮੰਗਦਾ ਹੈ ਪਰ ਆਪਣੇ ਆਪ ਵੀ ਪੜ੍ਹਾਈ ਕਰਨ ਜਾਂ ਖੇਡਣ ਦੇ ਯੋਗ ਹੈ। ☐

(ੲ) ਕਾਫੀ ਵੇਰਾਂ ਧਿਆਨ ਮੰਗਦਾ ਹੈ (ਜਿਵੇਂ ਕਿ ਆਮ ਤੌਰ ਤੇ ਹਰ ਕੰਮ ਵਿਚ ਮਦਦ ਚਾਹੁੰਦਾ ਹੈ, ਬਹੁਤਾ ਸਮਾਂ ਅਧਿਆਪਕਾਂ ਦੇ ਪਿੱਛੇ ਪਿੱਛੇ ਲਗਾ ਰਹਿੰਦਾ ਹੈ, ਕੁੱਦੜ ਚੁਕੇ ਜਾਣਾ ਲੋਚਦਾ ਹੈ)। ☐

7

(a) Rarely demands a great deal of attention. ☐

(b) Sometimes asks for a lot of attention. but can work or play independently. ☐

(d) Frequently demands attention (e.g. often wants to be helped, to be carried, follows staff around most of the time). ☐

8.

(ੳ) ਹਕਲਾਉਂਦਾ ਹੈ, ਥੱਥਲਾਉਂਦਾ ਹੈ ਜਾਂ ਜਦੋਂ ਬੋਲਦਾ ਹੈ ਤਾਂ ਗੱਲ ਚੰਗੀ ਤਰ੍ਹਾਂ ਸਮਝ ਨਹੀਂ ਆਉਂਦੀ। ☐

(ਅ) ਕਦੇ ਕਦੇ ਗੱਲ-ਬਾਤ ਸਪਸ਼ਟ ਨਹੀਂ ਹੁੰਦੀ। ☐

(ੲ) ਸਪਸ਼ਟ ਗੱਲ-ਬਾਤ ਕਰਦਾ ਹੈ ਜੋ ਛੇਤੀ ਸਮਝ ਆਉਂਦੀ ਹੈ। ☐

8

(a) Stutters, stammers or has poor articulation. ☐

(b) Speech sometimes not clear. ☐

(c) Clear speech easy to understand. ☐

9.

		ਅਧਿਆਪਕ ਨਾਲ,	ਬਚਿਆਂ ਨਾਲ
(ੳ)	ਖੁੱਲ ਕੇ ਗੱਲ-ਬਾਤ ਕਰਦਾ ਹੈ।	☐	☐
(ਅ)	ਗੱਲ ਕਰਨ ਵਿਚ ਕੁਝ ਝਿਜਕਦਾ ਹੈ।	☐	☐
(ੲ)	ਬੋਲਣ ਤੋਂ ਕਾਫੀ ਝਿਜਕਦਾ ਹੈ ਜਾਂ ਫਿਰ ਬੋਲਦਾ ਹੀ ਨਹੀਂ।	☐	☐

9

		(i) Staff	(ii) Children
(a)	Speaks freely to :	☐	☐
(b)	Some reluctance to speak to :	☐	☐
(c)	Will not speak or very reluctant to speak to :	☐	☐

10.

(ੳ) ਖੌਰੂ (ਚੀਖ-ਚਿਹਾੜਾ) ਨਹੀਂ ਪਾਉਂਦਾ। ☐

(ਅ) ਕਦੇ ਕਦੇ ਕੁਝ ਮਿੰਟਾਂ ਲਈ ਖੌਰੂ ਪਾਉਂਦਾ ਹੈ। ☐

(ੲ) ਆਮ ਤੌਰ ਤੇ ਕਾਫੀ ਸਮੇਂ ਲਈ ਖੌਰੂ ਪਾਉਂਦਾ ਹੈ ਜਾਂ ਫਿਰ ਚੀਖਦਾ ਹੈ, ਲੱਤਾਂ ਮਾਰਦਾ ਜਾ ਕਾਬੂ ਤੋਂ ਬਾਹਰ ਹੋ ਜਾਂਦਾ ਹੈ। ☐

10

(a) Doesn't have temper tantrums. ☐

(b) Sometimes has tantrums (lasting usually a few minutes). ☐

(c) Has frequent (at least daily) or very long tantrums, with screaming, kicking, or complete loss of control. ☐

11.

(ੳ) ਅਕਸਰ ਦੂਸਰੇ ਬੱਚਿਆਂ ਕੋਲ ਜਾਂਦਾ ਹੈ, ਮਿਲਣਸਾਰ ਹੈ। ☐

(ਅ) ਦੂਸਰੇ ਬੱਚਿਆਂ ਨਾਲ ਖੇਡਣ ਵਿਚ ਕੁਝ ਝਿਜਕ ਮਹਿਸੂਸ ਕਰਦਾ ਹੈ ਪਰ ਕਦੇ-ਕਦੇ ਉਹਨਾਂ ਨਾਲ ਜਾ ਰਲਦਾ ਹੈ। ☐

(ੲ) ਬਹੁਤ ਹੀ ਘੱਟ ਜਾਂ ਬਿਲਕੁਲ ਹੀ ਦੂਸਰੇ ਬੱਚਿਆਂ ਨਾਲ ਨਹੀਂ ਖੇਡਦਾ, ਉਹਨਾਂ ਨੂੰ ਗੌਲਦਾ ਹੀ ਨਹੀਂ। ☐

11

(a) Often plays with or approaches other children, very sociable. ☐

(b) Some reluctance to play with other children, but will join in sometimes. ☐

(c) Rarely or never plays with other children, tends to ignore them. ☐

12.

(ੳ) ਸਟਾਫ ਕੋਲ ਜਾ ਕੇ ਵਧੇਰੇ ਝੁਸਕਦਾ, ਰਉਂ ਰਉਂ ਕਰਦਾ ਜਾਂ ਸ਼ਿਕਾਇਤਾਂ ਲਗਾਉਂਦਾ ਹੈ। ☐

(ਅ) ਹਰ ਰੋਜ਼ ਨਹੀਂ ਪਰ ਕਦੇ-ਕਦੇ ਝੁਸਕਦਾ, ਸ਼ਿਕਾਇਤਾਂ ਲਗਾਉਂਦਾ ਜਾਂ ਰਉਂ ਰਉਂ ਕਰਦਾ ਹੈ। ☐

(ੲ) ਬਹੁਤ ਹੀ ਘੱਟ ਜਾਂ ਬਿਲਕੁਲ ਹੀ ਨਹੀਂ ਝੁਸਕਦਾ, ਰਉਂ ਰਉਂ ਨਹੀਂ ਕਰਦਾ ਜਾਂ ਸ਼ਿਕਾਇਤਾਂ ਨਹੀਂ ਲਗਾਉਂਦਾ। ☐

12

(a) Whines, complains or moans to staff a great deal. ☐

(b) Sometimes whines, complains or moans, but not daily. ☐

(c) Rarely or never whines, moans or complains. ☐

13.

(ੳ) ਬਹੁਤ ਹੀ ਕੋਮਲਚਿੱਤ ਤੇ ਜਜ਼ਬਾਤੀ ਹੈ ਅਤੇ ਛੋਟੀਆਂ ਛੋਟੀਆਂ ਗੱਲਾਂ 'ਤੇ ਘਬਰਾ ਜਾਂਦਾ ਹੈ (ਜਿਵੇਂ ਕਿ ਠੇਡਾ ਖਾ ਕੇ ਡਿੱਗ ਜਾਣ ਤੇ, ਕਿਸੇ ਚੀਜ਼ ਦੇ ਟੁੱਟ ਜਾਣ ਤੇ, ਕਹਾਣੀਆਂ ਤੇ, ਰੋਜ਼ਮਰਾ 'ਚ ਆਈਆਂ ਤਬਦੀਲੀਆਂ ਤੇ, ਹੱਥਾਂ ਦੇ ਗੰਦੇ ਹੋਣ ਤੇ)। ☐

(ਅ) ਕਦੇ-ਕਦੇ ਛੋਟੀਆਂ ਛੋਟੀਆਂ ਗੱਲਾਂ ਤੋਂ ਘਬਰਾ ਜਾਂਦਾ ਹੈ। ☐

(ੲ) ਲੋੜ ਤੋਂ ਵੱਧ ਕੋਮਲ ਚਿਤ ਜਾਂ ਜਜ਼ਬਾਤੀ ਨਹੀਂ ਹੈ, ਛੇਤੀ ਕੀਤੇ ਘਬਰਾਉਂਦਾ ਨਹੀਂ। ☐

13

(a) Very sensitive, gets upset easily over many minor things (e.g. falling over, breaking things, stories, changes in routine, getting dirty hands). ☐

(b) Sometimes very upset over minor things. ☐

(c) Not over sensitive, not easily upset, ☐

14.

(ੳ) ਦੂਸਰੇ ਬੱਚਿਆਂ ਨਾਲ ਬਹੁਤ ਹੀ ਘੱਟ ਲੜਦਾ ਹੈ। ਉਨ੍ਹਾਂ ਨੂੰ ਘੱਟ ਹੀ ਦੰਦੀ ਵੱਢਦਾ, ਠੁੱਡੇ ਜਾਂ ਮੁੱਕੇ ਮਾਰਦਾ ਹੈ। ☐

(ਅ) ਦੂਸਰੇ ਬੱਚਿਆਂ ਨਾਲ ਕਦੇ-ਕਦੇ ਹੀ ਲੜਦਾ ਜਾਂ ਉਹਨਾਂ ਨੂੰ ਦੰਦੀ ਵੱਢਦਾ, ਠੁੱਡੇ ਜਾਂ ਮੁੱਕੇ ਮਾਰਦਾ ਹੈ। ☐

(ੲ) ਅਕਸਰ ਬਲਕਿ ਹਰ ਰੋਜ਼ ਹੀ, ਬਗੈਰ ਕਿਸੇ ਉਕਸਾਹਟ ਦੇ ਲੜਦਾ ਜਾਂ ਦੂਸਰੇ ਬੱਚਿਆਂ ਨੂੰ ਦੰਦੀਆਂ ਵੱਢਦਾ ਹੈ, ਠੁੱਡੇ ਜਾਂ ਮੁੱਕੇ ਮਾਰਦਾ ਹੈ। ☐

14

(a) Rarely bites, kicks, hits, or fights with other children. ☐

(b) Sometimes fights, bites, kicks or hits other children. ☐

(c) Frequent (i.e. at least daily) unprovoked fighting, hitting, biting or kicking. ☐

15.

(ੳ) ਜਮਾਤ ਵਿਚ ਬਹੁਤਾ ਸਮਾਂ ਇਧਰ-ਉਧਰ ਤੱਕਦਾ ਰਹਿੰਦਾ ਹੈ ਜਾਂ ਬਿਨਾਂ ਮਕਸਦ ਇਧਰ-ਉਧਰ ਘੁੰਮਦਾ ਰਹਿੰਦਾ ਹੈ। ☐

(ਅ) ਕੁਝ ਸਮਾਂ ਇਧਰ-ਉਧਰ ਤੱਕਦਾ ਜਾਂ ਘੁੰਮਦਾ ਰਹਿੰਦਾ ਹੈ। ☐

(ੲ) ਆਮ ਤੌਰ ਤੇ ਆਪਣੇ ਕੰਮ ਵਿਚ ਮਗਨ ਰਹਿੰਦਾ ਹੈ। ਬਹੁਤ ਹੀ ਘੱਟ ਬਿਨਾਂ ਮਕਸਦ ਇਧਰ ਉਧਰ ਘੁੰਮਦਾ ਜਾਂ ਤਕਦਾ ਹੈ। ☐

15

(a) Spends much of the time in class staring into space or aimlessly wandering. ☐

(b) Spends some periods wandering or staring into space. ☐

(c) Usually occupied, rarely seen aimlessly wandering or staring. ☐

16.

(ੳ) ਦੂਸਰੇ ਬੱਚਿਆਂ ਦੇ ਕੰਮ ਜਾਂ ਖੇਡ ਵਿਚ ਅਕਸਰ ਦਖਲ ਦਿੰਦਾ ਹੈ (ਜਿਵੇਂ ਕਿ ਦੂਸਰਿਆਂ ਉਤੇ ਰੋਹਬ ਜਮਾਉਂਦਾ ਹੈ, ਹੋਰਾਂ ਦੀ ਖੇਡ ਜਾਂ ਕੰਮ ਖਰਾਬ ਕਰਦਾ ਹੈ)। ☐

(ਅ) ਕਦੇ ਕਦੇ ਦੂਸਰੇ ਬੱਚਿਆਂ ਦੇ ਕੰਮ ਜਾਂ ਖੇਡ ਵਿਚ ਵਿਘਨ ਪਾਉਂਦਾ ਹੈ। ☐

(ੲ) ਦੂਸਰੇ ਬੱਚਿਆਂ ਦੇ ਕੰਮ ਜਾਂ ਖੇਡ-ਖਿਡੌਣਿਆਂ ਆਦਿ ਵਿਚ ਬਹੁਤ ਹੀ ਘੱਟ ਦਖਲ ਦਿੰਦਾ ਹੈ। ☐

16

(a) Frequently interferes with the work or play of other children (e.g. messes up a game, tries to boss others), ☐

(b) Sometimes interferes with the work or play of other children. ☐

(c) Hardly ever interferes with other children's games, toys, work, etc. ☐

17.

(ੳ) ਬਹੁਤ ਘੱਟ ਰੋਂਦਾ ਜਾਂ ਉਦਾਸ ਨਜ਼ਰ ਆਉਂਦਾ ਹੈ, ਸਿਵਾਏ ਥੋੜੇ ਸਮੇਂ ਦੇ (ਜਿਵੇਂ ਕਿ ਜਦੋਂ ਥੱਕਿਆ, ਭੁੱਖਾ ਜਾਂ ਬਿਮਾਰ ਹੁੰਦੇ)। ☐

(ਅ) ਕਦੇ ਕਦੇ ਬਹੁਤ ਸਮੇਂ ਲਈ ਦੁੱਖੀ ਜਾਂ ਰੋਣ ਹਾਕਾ ਰਹਿੰਦਾ ਹੈ। ☐

(ੲ) ਬਹੁਤ ਵੇਰਾ ਹਾਂਪੀ ਹਾਂਪੀ ਸਮੇਂ ਲਈ ਦੁੱਖੀ ਰਹਿੰਦਾ ਹੈ। ☐

18.

(ੳ) ਦੂਸਰੇ ਬੱਚਿਆਂ ਨੂੰ ਅਕਸਰ ਤੰਗ ਜਾਂ ਟਿਚਰਾ ਕਰਦਾ ਹੈ ਜਾਂ ਉਹਨਾਂ ਨਾਲ ਖਾਰ ਖਾਂਦਾ ਹੈ। ☐

(ਅ) ਕਦੇ-ਕਦੇ ਖਾਰ ਖਾਂਦਾ ਜਾਂ ਤੰਗ ਕਰਦਾ ਹੈ। ☐

(ੲ) ਉੱਕਾ ਹੀ ਨਹੀਂ ਜਾਂ ਬਹੁਤ ਘੱਟ ਖਾਰ ਖਾਂਦਾ ਜਾਂ ਤੰਗ ਕਰਦਾ ਹੈ। ☐

19

(ੳ) ਭਾਵੁਕ ਤੌਰ ਤੇ ਅਧਿਆਪਕਾਂ ਤੋਂ ਕਾਫੀ ਦੂਰ ਰਹਿੰਦਾ ਹੈ। ☐

(ਅ) ਅਧਿਆਪਕਾਂ ਤੋਂ ਕੁਝ ਹੱਦ ਤਕ ਦੂਰ ਰਹਿੰਦਾ ਹੈ, ਸਿਰਫ ਇਕ ਅਧਿਆਪਕ ਜਾਂ ਸਟਾਫ ਮੈਂਬਰ ਨਾਲ ਹੀ ਰਲਦਾ ਮਿਲਦਾ ਹੈ। ☐

(ੲ) ਸਾਰੇ ਅਧਿਆਪਕਾਂ ਨਾਲ ਮੇਲ ਮਿਲਾਪ ਹੈ। ☐

20.

(ੳ) ਬਹੁਤ ਵਾਰ ਖਿਡੌਣੇ ਜਾਂ ਕੋਈ ਹੋਰ ਸਮਾਨ ਤੋੜਦਾ ਹੈ। ☐

(ਅ) ਕਦੇ ਕਦੇ ਭੰਨ ਤੋੜ ਕਰਦਾ ਹੈ (ਜਿਵੇਂ ਕਿ ਜਾਣ ਬੁਝ ਕੇ ਚੀਜ਼ਾਂ ਸੁੱਟਣੀਆਂ, ਭੰਨਣੀਆਂ ਜਾਂ ਖੜਕਾਉਣੀਆਂ)। ☐

(ੲ) ਆਮ ਤੌਰ ਤੇ ਜਾਣ ਬੁਝ ਕੇ ਤੋੜ ਭੰਨ ਕਰਦਾ ਹੈ। ☐

21.

(ੳ) ਬਹੁਤ ਹੀ ਡਰਾਕਲ ਹੈ, ਇਸ ਦੇ ਚਿਹਰੇ ਉੱਤੇ ਡਰ ਦੇ ਚਿੰਨ ਪ੍ਰੱਤਖ ਨਜ਼ਰ ਆਉਂਦੇ ਹਨ। ☐

(ਅ) ਕੁਝ ਹੱਦ ਤਕ ਡਰਾਕਲ ਹੈ, ਕਈ ਛੋਟੇ ਛੋਟੇ ਜਾਂ ਇਕ ਦੋ ਵੱਡੇ ਡਰ ਇਸ ਦੇ ਮਨ ਵਿਚ ਹਨ। ☐

(ੲ) ਬਹੁਤ ਹੀ ਘੱਟ ਡਰਦਾ ਹੈ, ਬਸ ਮਾਮੂਲੀ ਕਿਸਮ ਦੇ ਭੈਅ ਹਨ। ☐

22.

(ੳ) ਹਰ ਆਦਤ ਦਾ ਮੁਲਾਂਕਣ ਨਿਮਨ ਲਿਖਤ ਢੰਗ ਨਾਲ ਕਰੋ।

(0) ਕਦੇ ਨਹੀਂ

(1) ਕਦੇ ਕਦੇ

(2) ਅਕਸਰ ਜਾਂ ਲੰਮੇ ਸਮੇਂ ਲਈ

ਬੈਠੇ-ਬੈਠੇ ਹਿੱਲਣਾ ☐

ਅੰਗੂਠਾ ਚੂਸਣਾ ☐

ਬੋਤਲ ਚੁੰਘਣਾ ☐

ਨਿਪਲ ਚੁੰਘਣਾ ☐

ਹੱਥ-ਰਸੀ ☐

ਵਾਲ-ਖਿੱਚਣੇ, ਚੂਸਣੇ ਆਦਿ ☐

ਸਿਰ ਭੰਨਣਾ ☐

ਹੋਰ ਕੋਈ (ਤਾਂ ਲਿਖੋ) ☐

23.

ਕੀ ਤੁਸੀਂ ਇਸ ਬੱਚੇ ਦੇ ਵਿਵਹਾਰ ਬਾਰੇ ਕੁਝ ਹੋਰ ਕਹਿਣਾ ਚਾਹੁੰਦੇ ਹੋ ? .....

.....

17

(a) Rarely cries or looks unhappy, except for brief periods (e.g. when tired, hungry, unwell). ☐

(b) Sometimes tearful or miserable for long periods. ☐

(c) Frequently miserable, on most days, for long periods. ☐

18

(a) Frequently taunts, teases or is spiteful to other children. ☐

(b) Sometimes spiteful or teasing ☐

(c) Rarely or never spiteful or teasing. ☐

19

(a) Very emotionally withdrawn from staff. ☐

(b) Somewhat withdrawn from all staff or responsive to only one particular adult. ☐

(c) Can be responsive to all staff. ☐

20

(a) Rarely destructive with toys/equipment. ☐

(b) Occasionally destructive (e.g throwing breaking or banging into things deliberately). ☐

(c) Very often deliberately destructive. ☐

21

(a) Very fearful, shows many marked fear reactions. ☐

(b) Somewhat fearful, several mild fears, or one or two marked fears. ☐

(c) Rarely fearful, mild fears only. ☐

22

Please rate each habit as follows :

(0) never occurs

(1) occasionally occurs for brief periods only

(2) Occurs frequently or for long periods

Rocking ☐

Thumb sucking ☐

Bottle sucking ☐

Dummy sucking ☐

Masturbation ☐

Hair sucking, pulling etc. ☐

Heading banging ☐

Other(s) ☐

23

Do you want to say anything else about the behaviour of this child ? .....

.....

Appendix 6: Letters To Teachers In Ludhiana For Study Two

Appendix 6.1: Letter to headteachers

Appendix 6.2: Letter to classteachers

Appendix 6.3: Reply form completed by Indian teachers

Appendix 6.4: Instructions for completing assessments

Appendix 6.1: Letter to Headteachers of Schools Who Were Invited To Participate In Study Two.

Dear Headteacher,

Re: Emotional And Behavioural Development In Young School Children

The enclosed letter provides details for study of children's emotional and behavioural development we are carrying out in collaboration with teachers of the first year of primary schools.

We hope that you will be willing to allow your teacher(s) to participate in this study. If so, would you kindly pass the letter on to the teachers concerned so that they can contact us if they wish to take part.

With regards,

Yours Sincerely,

Appendix 6.2: Letter To Indian Teachers Inviting Them To Participate In Study Two.

Re: Invitation to participate in a research project titled 'Emotional and Behavioural Development Of Young School Children'.

Dear Colleague,

A few children in every class show behaviours which are sometimes difficult to handle. For example, they may show lack of concentration in the class, fight with other children, tease, disobey, etc. In contrast, some children may be very shy, quiet, sensitive, look sad, or be withdrawn from others. Such behaviours shown by some children in the class may affect the entire class discipline and cause a lot of concern to the teachers. These behaviours may also come in the way of academic progress of children. Recent research has shown that such behaviours tend to continue to later years in a substantial number of children and affect their overall adjustment in life.

We are conducting a research study in collaboration with teachers, the main objective of which is to find out the nature of such behaviours shown by children studying in first year of primary schools. A second objective of the study is to understand the psychological processes of some selected children. We hope you will be willing to participate in this research study. The participation involves the following work:

What Participants Will Do

To complete a questionnaire consisting of 22 items which have to be answered by tick (/) marking for each child in their class.

What We Will Do

To talk to a few children in the class individually with the help of toys and games.

At the completion of this phase of research in about 4 months time, participating teachers will be invited for a one-day-workshop in which ways to manage such behaviours and the findings of this research will be discussed.

If you would like to participate in the study, please complete the enclosed form and return at your earliest convenience.

With regards,

Yours Sincerely,

Appendix 6.3: Reply Form Completed By Indian Teachers

Please Note :

1. This form must be completed by the classteacher of the first class.

2. Please complete the form only for those children who have been in your class for atleast two months.

3. All information collected in connection with this research will be kept confidential and used only for research purposes.

I would like to participate in the research study titled, 'Emotional and Behavioural Problems In children'.

1. Name Of the Teacher : .....

2. Address of the School : _____

_____

_____

Telephone : _____

3. Total number of children in your class : ..... Boys
..... Girls

In your view, does any child in your class show emotional and behavioural problems? Please write down the Roll No.s of all children on your class register and give your view regarding their behaviour against their Roll No.s in the columns below by putting a tick (/) mark in the appropriate column. Please make sure you put one tick (/) for each child.

		In your view does the child show problems		
Roll No.	Sex of the child	Definitely	Possibly	Rarely
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....

Appendix 6.4: Letter To Indian Teachers Containing Instructions For Completing The PBCL

Dear

Re: Emotional And Behavioural Development Of Young School Children

Thank you for agreeing to participate in our research project. Enclosed is a set of questionnaires. Below are some instructions which will help you in completing them:

What To Do

1.. Over the next week
Please take some time to familiarise yourself with the questionnaire itself. That is, read through the items and then start to observe your class with these behaviours in mind. Please do not fill in any questionnaire at this stage.

2. Filling in the questionnaire
Please fill one questionnaire for each chil using their Roll No.s as the identity marks. Think about the child's behaviour, reactions to pupils and situations in the past two months and base your ratings on actual behaviour shown by the children. Please work through each item without leaving any out.

3. Please put the completed questionnaires in the enclosed envlope. We will collect them personally from you in 2-3 weeks time.

NB: It is important that the same teacher who completed the reply forms fills these questionnaires.

Thank You,

Your Sincerely,

Appendix 7: The Adapted Harter Scale

Appendix 7.1: Redrawn and original sketches

Appendix 7.2: Panjabi version of the adapted Harter scale Items

ARTICLE REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

ARTICLE REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

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ARTICLE REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES

Appendix 8: Incomplete Doll Stories Task

Appendix 8.1: Original scoring system for mother related stories

Appendix 8.2: Revised scoring system for the mother related stories

Appendix 8.3: Teacher and peer related stories- setting, instructions & the themes

Appendix 8.4: Scoring system for the teacher and peer related stories

Appendix 8.5: Photograph of the materials used to carry out the mother related stories

Appendix 8.6: Photograph of the materials used to carry out the teacher related stories

Appendix 8.7: Photograph of the materials used to carry out the peer related stories

Appendix 8.8: Punjabi version of the mother, teacher & peer related stories- Setting, instructions & themes.

Appendix 8.1: Original Scoring System For Mother Related Stories (Cassidy, 1987).

Note: Please see Chapter Seven for scoring system for the 'present' story.

8.1.1 The Sorry Story

Score 5, The child admits it was his fault. The mother's response is helpful or explaining, or there is swift punishment. the mother feels mad, or unhappy in relation to the apology, but not sad. The relationship is not threatened by this situational anger. Negative emotions, where appropriate, can be admitted.

Score 4, The stories are similar to those above except the child does not admit that it was his fault.

Score 3, These stories are mid-range, or neutral. There is not much information, although there is recognition of the child-mother relationship. Stories in which the child is spanked go here.

Score 2, Slightly better than responses scored as 'one'. If the mother feels sad, the story is placed here. The child feels sorry for something bad that happened to the mother.

Score 1, The mother has no reaction. The child doesn't know what mother would do. The child hits the mother. The child puts self down. Either child or mother is overwhelmed or out of control. The transgression has led to a serious, potentially irrevocable breach in the relationship. The mother no longer loves the child.

8.1.2 The Unhappy And Mad Story

Score 5, These stories are very open and direct, both in terms of the child's recognising and admitting negative emotions, and in terms of his dealing with the stressful situation. The child admits anger or sadness. Conflict is permissible. The child describes the negotiation within relationship related to the problem. The child has a clear image of what the mother would do, and it is something active (either helpful or demanding). The child is not rejected or scorned. It is entirely possible that the child does not get his own way.

Score 4, These stories are slightly less open. If the story would otherwise be given a five, but the mother spanks the child, the story is scored here.

Score 3, Mid-range stories are placed here- stories in which there is some openess, and at the same time, either some avoidance or something somewhat hostile or disorganised.

Score 2, When asked and normally expected, the child denies feelings of anger or sadness. The relationship is not acknowledged, and the child works out the problem on his own. The child avoids interaction by withdrawing. The child cannot imagine what interaction might take place. Responses moderately hostile or bizarre are scored here.

Score 1, Very hostile or bizarre responses are coded here. the conflict has led to a serious, potentially irrevocable breach in the relationship, or there is no potential for interaction. The mother no longer loves the child.

8.1.3 The Doll/ Bike Stolen Story

Score 5, if the child turns immediately to the parent for help. The mother and child are both active in going after the bike. There is positive interaction to deal with this difficult situation. They get the bike back. All of the interaction between parent and child is positive, organised and supportive.

Score 4, if the child goes to the mother for help either immediately or after a very brief delay. The mother does something active to get the bike back, but here the interaction isn't altogether as full, active, and supportive as that scored 'five'. There isn't quite as much elaboration.

Score 3, if the child goes to mother; all the mother does is to call the police. They, in turn, may or may not get the bike back. The description of the interaction is quite restricted.

Score 2, if the child tries to get the bike back through his own initiative, and may or may not succed. Or, the story is bizarre or hostile, but somewhat less than in those stories scored as 'one'.

Score 1, if the story involves extremely bizarre, hostile, disorganised, or violent behaviour. the mother acts in a helpless manner. The mother is hostile, punitive, or sarcastic: "It serves you right"; "I told you so". Also if extreme avoidance is indicated when the child does not mention the mother, and when pressed about other possibilities, still doesn't mention mother. When asked specifically if it would have been better if he had gone to mother for help, the child says "no".

General: Scores can be raised if there is particularly positive and supportive interaction. Scores can be lowered if the mother's support is given conditionally or begrudgingly.

8.1.4 The Nothing For Dinner Story:

Score 5, These are very open and direct, both in terms of the child's recognising and admitting negative emotions, and in terms of his dealing with the stressful situation. The child admits anger or sadness. Conflict is permissable. The child describes the negotiation within the relationship related to the problem. The child has a clear image of what the mother would do, and it is something active (either helpful or demanding). The child is not rejected or scorned. It is entirely possible that the child does not get his own way.

Score 4, These stories are slightly less open. If the story would otherwise be scored a five, but the mother spanks the child, the story is scored here.

Score 3, Mid-range stories are placed here- stories in which there is some openness, and at the same time, either some avoidance or something somewhat hostile or disorganised.

Score 2, When asked and normally expected, the child denies feelings of anger or sadness. the relationship is not acknowledged, and the child works out the problem on his own. The child avoids interaction by withdrawing. the child cannot imagine what interaction might take place. Responses moderately hostile or bizarre are scored here.

Score 1, Very hostile or bizarre responses are coded here. The conflict has led to a serious, potentially irrevocable breach in the relationship, or there is no possibility for interaction. The mother no longer loves the child.

8.1.5 The Noise In The Dark Story

Score 5, These children readily seek comfort and support. They receive it and are comforted by it. There is no ambivalence. The children feel protected. the children freely admit fear or other negative emotions when appropriate.

Score 4, For the most part, these children freely seek and receive help and comfort. however, there is some bit of insecurity or avoidance which prevents the highest rating.

Score 3, This score is given for mid-range stories. There is an equal balance of acceptance and support on the one hand, and rejection, avoidance, or bizarreness on the other.

Score 2, Some avoidance may be present. the child doesn't turn to the parent for help. Either the parent won't protect him or if the child couldn't figure out what the noise was, he wouldn't turn to the parent. The mother is not actively helpful. the mother does something negative or bizarre to the child.

Score 1, These stories are either extremely avoidant or extremely bizarre or both. If avoidant, the child tries to shut out or ignore awareness of the frightening aspects (tries not to think about it, ignores it, runs away, pretends it's not there, hides). the parent may collude in this with the child. The child may deny experiencing fear or any negative emotions, or he may deny that he needs any help from anyone. Generally,

he feels there is no one who can protect him. Or the protector is an inappropriate person (the baby, the self) or an object. (To say that the dog will protect him is o.k.). When asked what he would do if he couldn't figure out what the noise was, he doesn't mention that he would go to the parents. When the child goes to the parents, they are not helpful. They may send the child away, although this is not necessarily bad. Context is important here. (Be very careful when deciding between reassurance and rejection. Note what else happens). Very bizarre, violent, or self-destructive stories are scored here. All stories about ghosts, robbers, etc. don't necessarily fall here.

General: Scores can be raised if mother is particularly positive and supportive interaction. Scores can be lowered if the mother's support is given conditionally or begrudgingly.

Appendix 8.2: Revised Scoring System For The Mother Related Stories.

(Note: See Chapter Seven for revised scoring system for the Present Story).

8.2.1 The Sorry Story:

Score 5, if the child admits his fault, is forgiven spontaneously and the mother does not stop loving him. The mother may make a remark like 'be careful in future'.

Score 4, if the child is forgiven, admits his fault, the mother does not stop loving him but the child responds on persuasion or suggestion by the interviewer.

Score 3, if the responses are mixed. For instance, if the child does not admit fault but the mother does not stop loving, or if mother is angry with the child, beats him but forgives and does not stop loving.

Score 2, if the child presents mother's reactions as mildly negative or indifferent. For instance, if the mother ignores the child's apology, does not listen to the child's apology, or if the child does not reveal the mother's reaction even on persuasion.

Score 1, if the child spontaneously presents a negative picture of the relationship. For instance, if the mother is angry with the child, beats him or tells him off, does not forgive him and stops loving him.

8.2.2 The Doll/ Bike Stolen Story:

Score 5, if the child spontaneously approaches the mother for help either when the situation is first described or in the later prompt, " what if he hadn't been able to get the bike back on his own". The mother offers constructive help to get the bike back, for example if she goes out with the child to see. The child's response to mother is spontaneous and the mother's help is sought without any hesitation or persuasion.

Score 4, the child approaches mother for help but after persuasion or suggestion, the mother offers help but the help described is resricted.

Score 3, if the interaction described is mixed. the mother is punitive as well as helpful. The child is unsure of the mother's help or if the child blames the mother for the theft but approaches her and she helps.

Score 2, if the child presents a mildly negative or indifferent view of the interaction. For instance, if the mother is approached but is unhelpful, rejecting, does not help in getting the bike back. The child does not elicit information about mother's help even on persuasion.

Score 1, if the child presents a spontaneously negative picture of the relationship. For instance, if the mother beats the child, is angry with the child for the loss of the bike, makes comments like she won't ever buy him a new one and does not help in getting the bike back or if the child does not tell the mother or approach her for help for fear of being punished.

8.2.3 The Noise In the Dark Story:

Score 5, If the mother is spontaneously approached and she offers constructive help to the child, like switching on the light and or going out to see, or reassures the child to his satisfaction or lets the child sleep in her room if the child is not reassured.

Score 4, if the mother is approached after persuasion or on suggestion, the mother is helpful and/ or reassuring but the help described is restricted.

Score 3, if the mother is not willing to help but helps in the end. For instance, if she tells off the child for disturbing her sleep, but later helps.

Score 2, if the mother is approached but is indifferent or mildly negative. For instance if she ignores the child or asks him to sleep without trying to find out any details of the difficuly or without offering any help, the child does not elicit any help offered even on persuasion.

Score 1, If the mother is spontaneously negative- beats the child, or scolds him and makes no effort to help. If the child does not approach the mother for the fear of being punished.

Appendix 8.3: The Teacher And Peer Related Stories- Setting, Instructions To Administer & The Themes

8.3.1 The Teacher Related stories

8.3.1.1 Setting: A female doll, dressed as an adult (in a *Sari*) is placed in front of a group of about 6-8 boy and girl dolls. The interviewer and the child are sitting in the same position as for the mother related stories.

8.3.1.2 Instructions: The interviewer points to the dolls and says, "imagine, this is a classroom. These are the children in the class and this (pointing to the adult looking doll) is their classteacher". She then asks, " which one of these children is the most like you". After the child makes his choice, she continues, " we are going to make some more stories about this child in the school classroom. It is going to work the same way as before, I'll say a little bit and then you can complete the story in whatever way you like". Ok, shall we start?

The interviewer, then presents the story themes in the order in which they are described below. Each story is followed by probes (given below as later prompts). These probes depend upon the child's response. The questions given here act as a guide to continue conversation with the child around the theme. Sometimes the interviewer might like to continue the story by saying tell me more, before giving any specific prompts or suggestions. Each story lasts about two minutes.

8.3.1.3 Teacher Related Story Themes

Note: The stories given are for boys. The protagonist was a female for girls.

1. The Flower Bringing Story: The interviewer points to the identified doll character and says, " One day when this child came to school, he got a flower for his teacher. What happened then?"

Later Prompts: Did the teacher say anything? What did she say? What did she do with it? How did the child feel? How did the teacher feel?

2. The Homework Story: "One day, this teacher gave home work to the children. She asked them to do a few sums and write answers to some questions. The next day this child came to school without doing his home work. What happened when it was his turn to get the work checked?"

Later prompts: What did the teacher say? Why hadn't he done the work? How did he feel?

3. The Classwork Story: "One day, this teacher asked the children in the class to write some tables and fill in the blanks. After a while, she started calling them one by one to see their work. What happened, when it was his turn?"

Later Prompts: What did the teacher say? Had he done the work? How did he feel?

4. The Sick In Classroom Story: One morning, when this child arrived at school, she was suddenly sick in the classroom. What happened, next?

Later prompts: What did he do? Did he ask for anybody's help? Did she tell the teacher? What did the teacher do? How did the child feel?

8.3.2 The Peer Related Stories

8.3.2.1 Setting: Four boys and four girls are placed in front of the same doll house as in the other stories. The child and the interviewer sitting in the same position as in the mother stories.

8.3.2.2 Instructions: The interviewer points to the dolls and says, "these children live near each other's place. They generally play together in the evenings when they come back from school". Then the interviewer asks, "which doll looks the most like you?" After the child has made the choice, the interviewer continues, "we are now going to talk about this child and make stories like we did before. I'll start the story, say a little bit and then ask, what happens next? and then you can say the rest. You can say anything you like to complete the story just as you did before. There is no right or wrong answer and like before there are no marks for these. Shall we start? OK, here is the first....".

The interviewer then continues with the stories in the order in which they are described below. She points to the doll characters as she describes the story situations. Like the mother and teacher related stories, each story is followed by probes depending upon a child's responses. The questions for probing are also given below and act as prompt guides to get the child to talk around the theme.

8.3.2.3 Peer Related Story Themes

1. The Arriving Late story: One evening, when this child (the identified doll character) arrived in the playground, all other children had already started playing a game. Tell me, what happened next?

Later prompts: What did he do or say ? What did the other children say or do? How did the child feel?

2. The New Clothes Story: This child's mummy bought him a pair of trousers. He wore them when he went out to play in the evening. What happened, then?

Later prompts: Did anyone notice the new trousers? Did anyone say anything about the trousers?

3. The Birthday Story: Another child (not the identified character), who lived near this child's home was having a birthday party, what happened then?

Later prompts: Was he (the identified one) invited to the party, if yes, did he go, what did they do, what happened. If not, why not?

4. The Hurt Away Story: The child (identified) was playing with another child in a playground not very near to their house. As they were playing, they walked to another playground, even farther away from their home. Then this boy (the identified one) got hurt. What happened, then?

Later prompts: How did he get hurt? What did he do? What did the other child do? How did this child feel? How did the other child feel?

Appendix 8.4: Scoring System For Teacher And Peer Related Stories

8.4.1 Teacher Related Stories

8.4.1.1. The Flower Bringing Story:

Score 5, if the child spontaneously expresses a positive remark from the teacher. She accepts the flower with gratitude or a smile and shows affection to the child in some way like pats his back. The child feels good/happy.

Score 4, if the child gives a positive picture of the interaction but after suggestion or persuation or if the child says that she only said, "thank you" and not any further.

Score 3, if the child gives a mixed picture, the teacher accepts the flower with thanks but says, do not bring it in future.

Score 2, if the child presents an indifferent view of the teacher's response. For instance, he says that she didn't say anything or if the teacher asks the child to leave it on the desk and keeps busy with her routine.

Score 1, if the teacher punishes the child for bringing the flower or if she does not accept the flower or does something negative, like throws the flower in the bin or is rude, like says, " you don't study well, I won't accept your flower".

8.4.1.2. The Homework Story:

Score 5, if the teacher believes the reason offered by the child for not doing the work and allows him to finish it in the classroom or by the next day or over the weekend. She might say, "be regular in future" or make an admonition.

Score 4, if the child shows some reluctance and says with persuasion or on suggestion that the teacher believed him and/ or let him finish the work in the classroom.

Score 3, if the teacher's response is mixed, she believes the reason given by the child but scolds.

Score 2, if the teacher does not believe the child and is either indifferent, does not say anything or is mildly negative.

Score 1, if the teacher does not believe the child, blames him for always telling lies, beats him, says she will speak to the headteacher or actually takes him to the head or says she will talk to the parents.

P.S.: However, most children tended to give uniform answers in this story which fitted the category scoring 'one'. They insisted on saying that the teacher beat up the child and did not believe him. This story was therefore discarded from scoring and analysis.

8.4.1.3. The Classwork Story:

Score 5, if the teacher reacts positively to the child's work and the child spontaneously gives an account that the teacher praised his work and liked him, expressed joy or gave him stars, the child is pleased.

Score 4, if the child needs persuasion to reveal the teacher's reaction but the responses are positive, or the teacher might say the work is fine but not praise elaborately, there is nothing negative in the story.

Score 3, if the child presents a mixed view of the teacher's response.

Score 2, if the teacher is indifferent, the work is all correct but she does not praise, might say something matter of factly, for instance, "OK, go back to your seat".

Score 1, If the teacher beats the child, the work is all wrong, she says, something like, even yesterday you did it all wrong, threatens or takes the child to the headteacher, or says she will speak to the parents or speaks to the parents and the child is blamed and punished.

8.4.1.4. The Sick In Classroom Story :

Score 5, If the child spontaneously approaches the teacher and she is concerned about the child and does some thing constructive to help the child, like send him to the medical room with another child or send for the parents.

Score 4, if the child approaches with reluctance, or on suggestion or persuasion, the help described is restricted.

Score 3, if teacher makes a negative remark but helps. For instance she might say, you are always falling sick, why did you come to school, if you were not well, but sends for help or excuses the child from classwork.

Score 2, if the teacher is indifferent, she may ignore after noticing that the child is unwell, may carry on her work without paying any attention to the child, offers no help.

Score 1, if the teacher is punitive- she beats or says, you are making excuses, expects the child to continue doing the work (academic) or if the child does not tell her that he is unwell or approach her for help even on suggestion, because he thinks she will punish.

8.4.2 Scoring System For Peer Related Stories

8.4.2.1. The Arrived Late Story

Score 5, if the child spontaneously requests the peers to let him join in and is allowed to join or if they spontaneously ask him to join in. The peers are clearly positive and keen to let the child join the game.

Score 4, if the peers let the child join on a condition, such as to be early in future or to wait till the next game starts. The child must not be upset with the peers' remarks. or if the child gives a positive view after persuasion or on suggestion. Or if the child gets help from a family member (parent or older sibling) or someone else, to request the peers to let him join and the person who is helping does not scold or beat the peers to get the child into the group.

Score 3, if the peers do not let the child join in but later allow out of pity because the child is upset or crying, or they just patch up.

Score 2, if the peers ask the child to wait but do not let him join or if they go on playing without paying any attention to the child's request or if the child just stands by- neither asks, nor is asked to join. There may be persuasion.

Score 1, if the child spontaneously reveals a negative picture of the encounter. For instance, if the peers are rude or sarcastic and do not let him join or if the child gets into a fight with the peers because thay do not let him join. Or if a family member comes and beats the peers.

8.4.2.2. The New Clothes Story:

Score 5, if the peers spontaneously praise the child's new clothes by making comments like, "that's a nice dress" or "who bought it for you". The child is pleased with the complement.

Score 4, if the peers notice the dress, make some positive remark or if the child responds with persuasion or on suggestion.

Score 3, if the response is mixed. For example, the peers make a positive remark but later make the dress dirty or tear it.

Score 2, if the peers are indifferent or mildly negative. For example if even on suggestion the child says that the peers did not notice or comment on the dress or if they make a negative comment like, "why do you have to wear new clothes to play?"

Score 1, if peers tear the dress, or make it dirty or push the child and he falls and the dress gets dirty and the child blames the peers for doing it all intentionally.

8.4.2.3. The Hurt Away From Home Story:

Score 5, if the accompanying peer is spontaneously helpful, takes the child to the doctor or home, or rushes to seek help from someone passing by, or runs to inform parents or is concerned and sympathises.

Score 4, if the accompanying peer is described as helpful but after persuasion or on suggestion. The help offered or the concern expressed may not be elaborate.

Score 3, if the accompanying peer is blamed for the hurt but is also described as helpful.

Score 2, if the accompanying peer is indifferent and the child does not mention help offered by the peer even on suggestion.

Score 1, if the accompanying peer is spontaneously blamed for hurting the child. If the peer runs away to his home leaving the child behind or does not offer help.

8.4.2.4 The Birthday Party Story:

Score 5, if the child spontaneously describes the party as enjoyable, promptly mentions that he was invited when asked or otherwise, gives pleasant details of the party events- such as the child took a gift and the birthday boy liked it. The child talks about fun things at the party, eating, playing, singing.

Score 4, if the child has to be prompted to give the party details but indicates that he was invited and goes to the party. There might be fewer details than those with the score of 5, but all description is positive. (A few scripts were scored 4, if the child is invited for the party but was unable to go, because he was not well or had to go elsewhere with mum. The child feels bad about not being able to go or might send a present).

Score 3, if the child is invited for the party, goes but gives a mixed account of the party. For instance, along with fun, the friend did not like the present, or there may be a fight or if the party is fun but there are fights and the child or the birthday boy is hurt.

Score 2, if the child gets invited but does not have fun there. There is nothing positive about the party except going there. The friend does not accept the present, or the child is not allowed to join in the games or if the child is invited but does not go intentionally and is not feeling bad about it.

Score 1, if the child is not invited to the party, or if the child is insulted by the peer or his/ her parent at the party or if the child is involved in a fight and the party ends in a chaos or on a negative note or if the child goes to the party but is not allowed into the house.

Materials Used For Carrying Out The Teacher Related Stories

Materials used For Carrying Out The Peer Related Stories

Appendix 8.8: Panjabi version of the mother, teacher and peer related stories

MOTHER RELATED STORIES

ਬੱਚੇ ਲਈ ਹਦਾਇਤਾਂ :-

ਇੰਟਰਵਿਊਅਰ ਗੁੱਡੇ-ਗੁੱਡੀਆਂ ਤੇ ਉਹਨਾਂ ਦੇ ਘਰ ਵੱਲ ਇਸ਼ਾਰਾ ਕਰਦਿਆਂ ਹੋਇਆਂ ਬੱਚੇ ਨੂੰ ਸਮਝਾਉਂਦੀ ਹੈ ਕਿ "ਇਸ ਘਰ ਵਿੱਚ ਇਹ ਸਾਰੇ ਰਹਿੰਦੇ ਹਨ, ਇਹ ਮੱਮੀ ਹੈ, ਇਹ ਪਾਪਾ ਨੇ ਤੇ ਇਹ ਇਹਨਾਂ ਦੇ ਬੱਚੇ ਹਨ (ਇਹ ਬੇਟਾ ਹੈ ਤੇ ਇਹ ਬੇਟੀ ਹੈ)"। ਇਸ ਤਰਾਂ ਗੁੱਡੇ-ਗੁੱਡੀਆਂ ਦੀ ਜਾਣ ਪਹਿਚਾਣ ਕਰਵਾਉਣ ਤੋਂ ਬਾਅਦ ਇੰਟਰਵਿਊਅਰ ਬੱਚੇ ਨੂੰ ਕਹਿੰਦੀ ਹੈ " ਇਹਨਾਂ ਵਿਚੋਂ (ਬੱਚੇ ਦਾ ਨਾਅ ਲੈ ਕੇ) ਵਰਗਾ ਕੋਣ ਹੈ?"

ਜਦੋਂ ਬੱਚਾ ਇਕ ਗੁੱਡੇ/ਗੁੱਡੀ ਨੂੰ ਚੁਣ ਲੈਂਦਾ ਹੈ ਤਾਂ ਇੰਟਰਵਿਊਅਰ, ਬੱਚੇ ਨੂੰ ਹੋਰ ਸਪੱਸ਼ਟ ਕਰਨ ਲਈ ਦਸਦੀ ਹੈ, "ਹੁਣ ਨਾ ਆਪਾਂ ਨੇ, ਇਹਨਾਂ ਗੁੱਡੇ-ਗੁੱਡੀਆਂ ਬਾਰੇ ਗੱਲਾਂ ਕਰਨੀਆਂ ਨੇ ਤੇ ਕਹਾਣੀਆਂ ਬਣਾਉਣੀਆਂ ਨੇ। ਬਈ ਮੈਂ ਇਹ ਦੇਖਣੈ ਕਿ ਬੱਚੇ ਕਿਵੈਂ ਦੀਆਂ ਕਹਾਣੀਆਂ ਬਣਾਉਂਦੇ ਐ, ਠੀਕ ਐ?"

ਇੰਟਰਵਿਊਅਰ ਬੱਚੇ ਦੇ 'ਹਾਂ' ਕਰਨ ਦਾ ਇੰਤਜ਼ਾਰ ਕਰਦੀ ਹੈ ਤੇ ਫਿਰ ਕਹਿੰਦੀ ਹੈ "ਬਈ ਪਹਿਲਾਂ ਥੋੜੀ ਜਿਹੀ ਕਹਾਣੀ ਮੈਂ ਸੁਣਾਉਂਗੀ ਫਿਰ ਤੁਸੀਂ ਉਸਨੂੰ ਪੂਰਾ ਕਰੀਓ। ਮੈਂ ਤੁਹਾਨੂੰ ਥੋੜੀ ਜਿਹੀ ਕਹਾਣੀ ਸੁਣਾ ਕੇ ਫਿਰ ਪੁਛੂੰਗੀ, "ਫੇਰ ਕੀ ਹੋਇਆ, ਤੇ ਫਿਰ ਬਾਕੀ ਦੀ ਕਹਾਣੀ ਤੁਸੀਂ ਬਣਾਈਓ। ਬਈ ਤੁਸੀਂ ਜਿਵੇਂ ਦੀ ਮਰਜ਼ੀ ਕਹਾਣੀ ਬਣਾ ਸਕਦੇ ਹੋ, ਜਿਵੇਂ ਦਾ ਤੁਹਾਡਾ ਦਿੱਲ ਕਰੇ, ਚਾਹੇ ਖੁਸ਼ੀ ਵਾਲੀ - ਚਾਹੇ ਗ਼ੱਮੀ ਵਾਲੀ, ਚਾਹੇ ਹਸਉਣੀ - ਚਾਹੇ ਡਰਾਉਣੀ, ਚਾਹੇ ਸੱਚੀ - ਚਾਹੇ ਝੂਠੀ, ਚਾਹੇ ਮਨ-ਘੜੰਤ, ਜਿਵੇਂ ਦੀ ਮਰਜ਼ੀ, ਠੀਕ ਐ ਬਈ।"

ਇੰਨਟਰਵਿਊਅਰ ਬੱਚੇ ਦੇ 'ਹਾਂ' ਕਰਨ ਦਾ ਇੰਤਜ਼ਾਰ ਕਰਦੀ ਹੈ ਤੇ ਫਿਰ ਕਹਿੰਦੀ ਹੈ, "ਬਈ ਇਸ ਕਹਾਣੀ ਵਿੱਚ ਕੁੱਝ ਗਲਤ ਜਾਂ ਠੀਕ ਨਹੀਂ ਹੈ, ਇਹ ਕਹਾਣੀਆਂ, ਨਾ ਤੇ ਆਪਾਂ ਨੇ ਕਿਸੇ ਨੂੰ ਦਸਣੀਆਂ ਨੇ ਤੇ ਨਾ ਹੀ ਕਿਸੇ ਨੂੰ ਸੁਨਾਉਣੀਆਂ ਨੇ, ਇਹ ਕਹਾਣੀਆਂ ਤੇ ਆਪਾਂ ਨੇ ਬਸ ਉਂਜ ਹੀ ਬਨਾਉਣੀਆਂ ਨੇ"।

ਨੋਟ:- ਹੇਠ ਲਿਖੀਆਂ ਕਹਾਣੀਆਂ ਮੁੰਡਿਆਂ ਲਈ ਹਨ।

1. THE PRESENT STORY:

ਇਸ ਮੁੰਡੇ ਨੂੰ (ਗੁੱਡੇ ਨੂੰ ਪਾਤਰ ਦਰਸਾਉਂਦੇ ਹੋਏ) ਹਰ ਰੋਜ਼ ਪੈਸੇ ਖਰਚਣ ਨੂੰ ਮਿਲਦੇ ਸੀ। ਉੱਹਨਾ ਪੈਸਿਆਂ ਵਿਚੋਂ ਇਹ ਆਪਣੀ ਮੱਮੀ ਲਈ ਤੋਹਫ਼ਾ ਖਰੀਦ ਕੇ ਲਿਆਇਆ। ਤੋਹਫ਼ਾ ਲਿਆ ਕੇ ਇਸਨੇ ਆਪਣੀ ਮੱਮੀ ਨੂੰ ਦਿਤਾ। ਬੱਈ ਫੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿਚ:

ਮੱਮੀ ਨੇ ਇਸ ਨੂੰ ਕੀ ਕਿਹਾ? ਮੱਮੀ ਨੂੰ ਤੋਹਫ਼ਾ ਕਿਵੇਂ ਦਾ ਲਗਾ? ਬਈ ਇਹ ਕੀ ਤੋਹਫ਼ਾ ਲੈਕੇ ਆਇਆ ਸੀ? ਬੱਈ ਇਸਦੀ ਮੱਮੀ ਨੂੰ ਕਿਵੇਂ ਦਾ ਮਹਿਸੂਸ ਹੋ ਰਿਹਾ ਸੀ? ਬਈ ਇਹ ਜੇ ਕੋਈ ਹੋਰ ਚੀਜ਼ ਲੈਕੇ ਆਉਂਦਾ ਤਾਂ ਕੀ ਉਹ ਚੀਜ਼ ਇਸਦੀ ਮੱਮੀ ਨੂੰ ਜ਼ਿਆਦਾ ਪਸੰਦ ਆਉਣੀ ਸੀ? ਮੱਮੀ ਨੇ ਤੋਹਫ਼ੇ ਦਾ ਕੀ ਕੀਤਾ? ਇਸ ਮੁੰਡੇ ਨੂੰ ਕਿਵੇਂ ਦਾ ਲੱਗ ਰਿਹਾ ਸੀ?

2. THE SORRY STORY:

ਇਸ ਮੁੰਡੇ ਦੀ ਮੱਮੀ ਇੱਕ ਦਿਨ ਬਾਹਰ ਵਿਹੜੇ ਵਿਚ ਬੈਠੀ ਸੀ। ਇਹ ਮੁੰਡਾ ਆਪਣੀ ਮੱਮੀ ਕੋਲ ਆਇਆ ਤੇ ਆ ਕੇ ਇਸਨੇ ਆਪਣੀ ਮੱਮੀ ਨੂੰ ਕਿਹਾ, "ਮੱਮੀ, ਮੱਮੀ ਮੈਨੂੰ ਮਾਫ਼ੀ ਦੇਦੋ"

ਬਾਅਦ ਵਿੱਚ:

ਬਈ ਇਹ ਮੁੰਡਾ ਆਪਣੀ ਮੱਮੀ ਕੋਲੋਂ ਕਿਸ ਗੱਲ ਦੀ ਮਾਫ਼ੀ ਮੰਗ ਰਿਹਾ ਸੀ? ਫੇਰ ਇਸਦੀ ਮੱਮੀ ਨੇ ਕੀ ਕਿਹਾ/ਕੀਤਾ? ਕੀ ਇਸਨੇ ਜਾਣ ਬੁਝ ਕੇ ਗਲਤੀ ਕੀਤੀ ਸੀ? ਬਈ ਜੇ ਉਹ ਚੰਗਾ ਮੁੰਡਾ ਹੁੰਦਾ, ਕੀ ਤਾਂ ਵੀ ਇੰਜ ਹੀ ਕਰਦਾ? ਇਸਦੀ ਮੱਮੀ ਨੂੰ ਕਿਵੇਂ ਦਾ ਲਗ ਰਿਹਾ ਸੀ? ਕੀ ਇਸ ਬੱਚੇ ਨੇ ਦੁਬਾਰਾ ਇਹ ਗਲਤੀ ਕੀਤੀ? ਕੀ ਇਸਦੀ ਮੱਮੀ ਇਸਨੂੰ ਪਿਆਰ ਕਰਦੀ ਸੀ ਜਾਂ ਪਿਆਰ ਕਰਨਾ ਛੱਡ ਦਿਤਾ ਸੀ?

3. THE BIKE/DOLL STOLEN STORY:

ਇਸ ਮੁੰਡੇ ਨੂੰ ਇਸਦੇ ਮੱਮੀ ਡੈਡੀ ਨੇ ਇਸਦੇ ਜੱਨਮ ਦਿਨ ਤੇ ਇੱਕ ਸਾਈਕਲ ਲੈ ਕੇ ਦਿੱਤਾ ਸੀ। ਇੱਕ ਦਿਨ ਜਦੋਂ ਇਹ ਮੁੰਡਾ ਸਕੂਲੋਂ ਵਾਪਸ ਆ ਰਿਹਾ ਸੀ ਤਾਂ ਰਸਤੇ ਵਿੱਚ ਇਸਨੇ ਵੇਖਿਆ ਕਿ ਕੋਈ ਹੋਰ ਮੁੰਡਾ ਜਿਸਨੂੰ ਇਹ ਜਾਣਦਾ ਵੀ ਨਹੀਂ ਸੀ, ਇਸਦੀ ਸਾਈਕਲ ਚਲਾ ਕੇ ਜਾ ਰਿਹਾ ਸੀ। ਬਈ ਫੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

ਫੇਰ ਇਸ ਮੁੰਡੇ ਨੇ ਕੀ ਕੀਤਾ? ਬਈ ਜੇ ਉਹ ਮੁੰਡਾ ਇਸਦੀ ਸਾਈਕਲ ਨਾ ਮੋੜਦਾ ਤਾਂ ਇਹ ਕੀ ਕਰਦਾ? ਕੀ ਇਸ ਮੁੰਡੇ ਦੀ ਗਲਤੀ ਕਰਕੇ ਸਾਈਕਲ ਗੁੰਮੀ ਸੀ? ਬਈ ਫੇਰ ਇਸਦੀ ਸਾਈਕਲ ਵਾਪਸ ਮਿਲੀ ਕਿ ਨਹੀਂ? ਜੇ ਕਰ ਬੱਚਾ ਮੱਮੀ ਦਾ ਕੋਈ ਜ਼ਿਕਰ ਨਹੀਂ ਕਰਦਾ ਤਾਂ ਕਹਿ ਸਕਦੇ ਹੋ, ਬਈ ਕੀ ਇਸਨੇ ਆਪਣੀ ਮੱਮੀ ਨੂੰ ਦਸਿਆ ਸੀ?

4. THE NOISE IN THE DARK STORY:

ਇੱਕ ਦਿਨ ਰਾਤ ਨੂੰ ਸਾਰੇ ਸੁੱਤੇ ਪੱਏ ਸੀ। ਇਸਦੇ ਮੱਮੀ ਤੇ ਪਾਪਾ ਆਪਣੇ ਕਮਰੇ ਵਿੱਚ ਸੁੱਤੇ ਪੱਏ ਸੀ। ਇਸਦੀ ਭੈਣ ਨਾਨੀ ਜੀ ਦੇ ਘੱਰ ਗੱਈ ਹੋਈ ਸੀ। ਇਹ ਮੁੰਡਾ

ਇਕੱਲਾ ਦੂਜੇ ਕਮਰੇ ਵਿੱਚ ਸੁੱਤਾ ਪਿਆ ਸੀ। ਅੱਧੀ ਰਾਤ ਵੇਲੇ ਅਚਾਨਕ ਉੱਚੀ ਸਾਰੀ ਆਵਾਜ਼ ਆਈ। ਇਸ ਮੁੰਡੇ ਦੀ ਨੀਂਦ ਖੁੱਲ ਗਈ, ਬਹੁਤ ਹਨੇਰਾ ਸੀ ! ਬਈ ਦੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿਚ:

ਇਸ ਮੁੰਡੇ ਨੂੰ ਕਿਵੇਂ ਦਾ ਲਗ ਰਿਹਾ ਸੀ? ਬਈ ਦੇਰ ਇਸਨੇ ਕੀ ਕੀਤਾ? ਕੀ ਇਹ ਆਪਣੀ ਮੱਮੀ ਕੋਲੋਂ ਮੱਦਦ ਲੈਣ ਗਿਆ? ਬਈ ਦੇਰ ਇਸਦੀ ਮੱਮੀ ਨੇ ਕੀ ਕੀਤਾ?

TEACHER RELATED STORIES

1. THE FLOWER BRINGING STORY:

ਇੱਕ ਦਿਨ ਇਹ ਮੁੰਡਾ ਸਕੂਲ ਫੁੱਲ ਲੈ ਕੇ ਆਇਆ। ਫੁੱਲ ਲਿਆਕੇ ਇਸਨੇ ਆਪਣੀ ਭੈਣ ਜੀ ਨੂੰ ਦਿਤਾ। ਬਈ ਦੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

ਭੈਣ ਜੀ ਨੇ ਇਸਨੂੰ ਕੀ ਕਿਹਾ? ਦੇਰ ਭੈਣ ਜੀ ਨੇ ਫੁੱਲ ਦਾ ਕੀ ਕੀਤਾ? ਭੈਣ ਜੀ ਨੂੰ ਕਿਵੇਂ ਦਾ ਮਹਿਸੂਸ ਹੋ ਰਿਹਾ ਸੀ? ਬਈ ਦੇਰ ਇਸ ਬੱਚੇ ਨੂੰ ਕਿਵੇਂ ਦਾ ਮਹਿਸੂਸ ਹੋ ਰਿਹਾ ਸੀ?

2. HOME WORK NOT DONE STORY:

ਇੱਕ ਦਿਨ ਇਸ ਮੁੰਡੇ ਨੂੰ ਜੋ ਘਰੋਂ ਕਰਨ ਲਈ ਕੰਮ (ਹੋਮ ਵਰਕ) ਮਿਲਿਆ ਸੀ, ਉਹ ਕੰਮ, ਇਹ ਮੁੰਡਾ ਘਰੋਂ ਕਰਕੇ ਨਹੀਂ ਲਿਆਇਆ। ਜਦੋਂ ਭੈਣ ਜੀ ਬੱਚਿਆਂ ਦਾ ਕੰਮ ਚੈਕ ਕਰਨ ਲੱਗੇ, ਅੱਤੇ ਇਸਦੀ ਵਾਰੀ ਆਈ - ਬੱਈ ਦੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

ਭੈਣ ਜੀ ਨੇ ਇਸਨੂੰ ਕੀ ਕਿਹਾ? ਬਈ ਇਹ ਹੋਮ ਵਰਕ ਕਿਉਂ ਨਹੀਂ ਕਰਕੇ ਲਿਆਇਆ ਸੀ? ਭੈਣ ਜੀ ਇਸਨੂੰ ਕੀ ਕਹਿੰਦੇ ਸੀ? ਬੱਈ ਇਹਨੂੰ ਕਿਵੇਂ ਦਾ ਲੱਗ ਰਿਹਾ ਸੀ?

3. THE CLASS WORK STORY:

ਇੱਕ ਦਿਨ ਭੈਣ ਜੀ ਨੇ ਬੱਚਿਆਂ ਨੂੰ ਜਮਾਤ ਵਿੱਚ ਸਵਾਲ ਕਦੱਣ ਲੱਈ ਦਿਤੇ ਅੱਤੇ ਖਾਲੀ ਥਾਂਵਾਂ ਭਰਨ ਲਈ ਵੀ ਕਿਹਾ। ਫਿਰ ਥੋੜੀ ਦੇਰ ਬਾਅਦ ਭੈਣ ਜੀ ਨੇ ਬੱਚਿਆਂ ਦਾ ਕੰਮ ਚੈਕ ਕਰਨਾ ਸ਼ੁਰੂ ਕਰ ਦਿੱਤਾ। ਜਦੋਂ ਇਸਦੀ ਵਾਰੀ ਆਈ - ਬੱਈ ਦੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

ਭੈਣ ਜੀ ਨੇ ਇਸਨੂੰ ਕੀ ਕਿਹਾ? ਇਸਨੇ ਕੰਮ ਕਰ ਲਿਆ ਸੀ ਕਿ ਨਹੀਂ? ਇਸ ਮੁੰਡੇ ਨੂੰ ਕਿਵੈਂ ਦਾ ਲਗ ਰਿਹਾ ਸੀ?

4. THE SICK IN CLASS-ROOM STORY:

ਇੱਕ ਦਿਨ ਜਦੋਂ ਇਹ ਮੁੰਡਾ ਸਕੂਲ ਆਇਆ ਤਾਂ ਠੀਕ ਸੀ। ਫਿਰ ਇਹ ਅਚਾਨਕ ਹੀ ਜਮਾਤ ਵਿੱਚ ਬਿਮਾਰ ਹੋ ਗਿਆ - ਬੱਈ ਦੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

ਫਿਰ ਇਸ ਮੁੰਡੇ ਨੇ ਕੀ ਕੀਤਾ? ਕਿਸੇ ਨੂੰ ਦਸਿਆ? ਕੀ ਭੈਣ ਜੀ ਨੂੰ ਦਸਿਆ? ਬਈ ਭੈਣ ਜੀ ਨੇ ਕੀ ਕੀਤਾ? ਇਸ ਮੁੰਡੇ ਨੂੰ ਕਿਵੈਂ ਦਾ ਮਹਿਸੁਸ ਹੋ ਰਿਹਾ ਸੀ?

PEER RELATED STORIES

1. THE LATE ARRIVING STORY:

ਇੱਕ ਦਿਨ ਜਦੋਂ ਇਹ ਬੱਚਾ ਸ਼ਾਮ ਨੂੰ ਮੈਦਾਨ ਵਿੱਚ ਖੇਡਣ ਪਹੁੰਚਿਆ ਤਾਂ ਬਾਕੀ ਬੱਚਿਆ ਨੇ ਪਹਿਲਾਂ ਹੀ ਖੇਡਣਾ ਸ਼ੁਰੂ ਕੀਤਾ ਹੋਇਆ ਸੀ - ਬਈ ਦੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

ਫਿਰ ਇਸ ਮੁੰਡੇ ਨੇ ਕੀ ਕੀਤਾ? ਕੀ ਇਸਨੇ ਕੁੱਛ ਕਿਹਾ? ਕੀ ਬਾਕੀ ਬਚਿਆਂ ਨੇ ਇਸਨੂੰ ਕੁੱਛ ਕਿਹਾ? ਇਸਨੂੰ ਕਿਵੈਂ ਦਾ ਮਹਿਸੁਸ ਹੋ ਰਿਹਾ ਸੀ?

2. THE NEW CLOTHES STORY:

ਇਸ ਮੁੰਡੇ ਦੀ ਮੱਮੀ ਨੇ ਇਸਨੂੰ ਇੱਕ ਨਵੀਂ ਪੈਂਟ ਲੈ ਕੇ ਦਿੱਤੀ। ਨੱਵੀਂ ਨੱਵੀਂ ਪੈਂਟ ਪਾ ਕੇ ਇਹ ਸ਼ਾਮ ਨੂੰ ਬਾਕੀ ਬੱਚਿਆਂ ਨਾਲ ਖੇਡਣ ਗਿਆ - ਬਈ ਫੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

ਕੀ ਬੱਚਿਆਂ ਨੇ ਇਸਨੂੰ, ਇਸਦੀ ਪੈਂਟ ਬਾਰੇ ਕੁੱਛ ਕਿਹਾ? ਬਈ ਕਿਸੇ ਨੇ ਦੇਖੀ ਸੀ ਇਸਦੀ ਪੈਂਟ?

3. THE HURT AWAY STORY:

ਇੱਕ ਦਿਨ ਇਹ ਬੱਚਾ, ਕਿਸੇ ਹੋਰ ਬੱਚੇ ਨਾਲ ਖੇਡਦਾ ਖੇਡਦਾ ਘਰੋਂ ਬਤੀ ਦੂਰ ਚਲਾ ਗਿਆ। ਉਥੇ ਖੇਡਦਿਆਂ ਹੋਇਆਂ ਇਸਦੇ ਸੱਟ ਵਜ ਗੱਈ - ਬਈ ਫੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

ਇਸ ਬੱਚੇ ਦੇ ਸੱਟ ਕਿਵੇਂ ਲਗੀ ਸੀ? ਫਿਰ ਇਸਨੇ ਕੀ ਕੀਤਾ? ਬਈ ਦੂਸਰੇ ਬੱਚੇ ਨੇ ਕੀ ਕੀਤਾ? ਇਸਨੂੰ ਕਿਵੇਂ ਦਾ ਮਹਿਸੂਸ ਹੋ ਰਿਹਾ ਸੀ?

4. THE BIRTHDAY STORY:

ਬਈ ਇੱਕ ਦਿਨ, ਇਹ ਮੁੰਡਾ (ਸੰਬੋਧਤ ਡੋਲ ਕਰੈਕਟਰ ਨਹੀਂ, ਕੋਈ ਦੂਸਰਾ ਡੋਲ ਕਰੈਕਟਰ) ਜਿਹੜਾ ਇਸਦੇ (ਸੰਬੋਧਤ ਡੋਲ ਕਰੈਕਟਰ) ਘਰ ਕੋਲ ਰਹਿੰਦਾ ਸੀ, ਆਪਣਾ ਜੱਨਮ ਦਿਨ ਮਨਾ ਰਿਹਾ ਸੀ - ਬਈ ਫੇਰ ਕੀ ਹੋਇਆ?

ਬਾਅਦ ਵਿੱਚ:

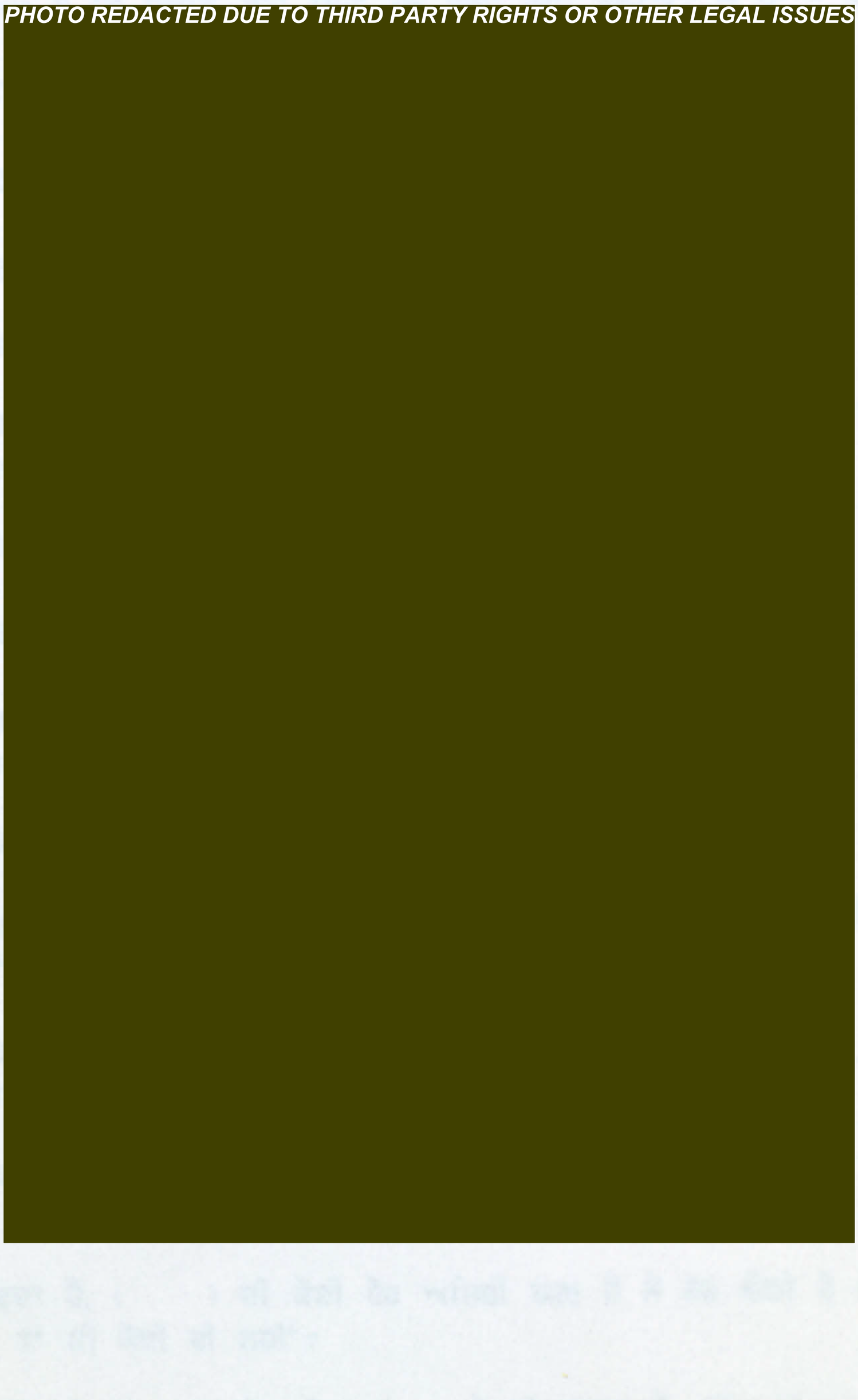
ਬਈ ਇਸ ਮੁੰਡੇ (ਸੰਬੋਧਤ ਡੋਲ ਕਰੈਕਟਰ) ਨੂੰ ਉੱਸਨੇ ਪਾਰਟੀ ਵਿੱਚ ਬੁਲਾਇਆ ਸੀ? ਜੇ ਹਾਂ - ਤਾਂ ਫੇਰ ਕੀ ਹੋਇਆ? ਜੇ ਨਹੀਂ - ਤਾਂ ਕਿਉਂ ਨਹੀਂ ਬੁਲਾਇਆ ਸੀ? ਪਾਰਟੀ ਤੇ ਕੀ ਹੋਇਆ ਸੀ? ਬੱਚਿਆਂ ਨੇ ਕੀ ਕੀਤਾ? ਜੇ ਇਹ ਮੁੰਡਾ ਪਾਰਟੀ ਤੇ ਨਹੀਂ ਗਿਆ ਤਾਂ ਕਿਉਂ ਨਹੀਂ ਗਿਆ? ਇਸ ਮੁੰਡੇ ਨੂੰ ਕਿਵੇਂ ਦਾ ਮਹਿਸੂਸ ਹੋ ਰਿਹਾ ਸੀ?

Appendix 9 : The Puppet Interview

Appendix 9.1: The photograph of elephant glove puppet

Appendix 9.2: The Punjabi version of the Puppet Interview questions

The Glove Puppet Used To Carry Out The Puppet Interview Task With Boys



Appendix 9.2: Panjabi translation of the Puppet Interview questions

1. ਹਾਥੀ ਪੁੱਛਦਾ ਹੈ, ਬਈ ਕਿ ਤੁਹਾਨੂੰ (ਬੱਚੇ ਦਾ ਨਾਅ ਲਓ) ਚੰਗਾ ਲਗਦਾ ਹੈ?

2. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਤੁਹਾਨੂੰ ( ) ਜਿਵੇਂ ਦਾ ਹੈ, ਉਵੇਂ ਦਾ ਹੀ ਚੰਗਾ ਲਗਦਾ ਹੈ ਜਾਂ ਤੁਹਾਡਾ ਦਿੱਲ ਕਰਦਾ ਹੈ ਕਿ ਇਸਨੂੰ ਥੋੜਾ ਜਿਹਾ ਹੋਰ ਚੰਗਾ ਬਣਾ ਦੱਈਏ? ਜੇ ਹਾਂ - ਤਾਂ ਕਿਵੇਂ?

3. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਬਈ ( ) ਚੰਗਾ ਮੁੰਡਾ ਹੈ?

4. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ( ) ਦਾ ਕੀ ਚੰਗਾ ਹੈ?

5. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਇਹ ਦਸੋ ਕਿ ( ) ਵਿੱਚ ਸੱਤ ਤੋਂ ਚੰਗਾ ਕੀ ਹੈ?

6. ਦੁਕਵਾਂ ਅਨੁਵਾਦ ਨਹੀਂ ਹੋ ਸਕਿਆ (excluded)

7. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਕੀ ( ) ਬਹੁਤ ਹੀ ਚੰਗਾ ਮੁੰਡਾ ਹੈ? ਜੇ ਹਾਂ - ਤਾਂ ਕੀ ਹਰ ਚੀਜ਼ ਵਿੱਚ ਚੰਗਾ ਹੈ?

8. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ( ) ਮੇਰੇ ਨਾਲ ਖੇਡੋਂਗੇ?

9. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ( ) ਮੇਰੇ ਦੋਸਤ ਬਣੋਂਗੇ?

10. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਕੀ ( ) ਨੂੰ ਬਹੁਤ ਕੁੱਛ ਕਰਨਾ ਆਉਂਦਾ ਹੈ? ਕੀ ( ) ਹਰ ਕੰਮ ਚੰਗੀ ਤਰਾਂ ਕਰਦਾ ਹੈ ਜਾਂ ਐਨੀ ਚੰਗੀ ਤਰਾਂ ਨਹੀਂ?

11. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਕੀ ( ) ਸੁਹਣਾ ਮੁੰਡਾ ਹੈ?

12. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਕੀ ( ) ਕੱਦੇ ਕੱਦੇ ਰੀਂਦਾ ਮੁੰਡਾ ਵੀ ਬਣ ਜਾਂਦੇ? ਜੇ ਨਹੀਂ - ਤਾਂ ਕੱਦੇ ਵੀ ਨਹੀਂ?

13. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ( ) ਦੀ ਸੱਤ ਤੋਂ ਬੁਰੀ ਗੱਲ ਕਿਹੜੀ ਹੈ? ਜੇ ਨਹੀਂ - ਤਾਂ ਕੀ ਕੋਈ ਵੀ ਨੱਹੀਂ?

14. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਬਈ ( ) ਨੂੰ ਹੋਰ ਲੋਕ ਵੀ ਪਸੰਦ ਕਰਦੇ ਹਨ? ਜੇ ਹਾਂ ਤਾਂ ਕੌਣ? ਹੋਰ ਕੌਣ?

15. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ( ) ਦੀ ਕੋਈ ਹੋਰ ਅਜਿਹੀ ਗਲ ਹੈ ਜੋ ਹੋਰ ਚੰਗੀ ਹੋ ਸਕਦੀ ਹੈ? ਜੇ ਨਹੀਂ - ਤਾਂ ਕੀ ਕੋਈ ਵੀ ਨਹੀਂ?

16. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ਕਿ ਆਮ ਤੋਰ ਤੇ ( ) ਜੋ ਵੀ ਕਰਦਾ ਹੈ, ਠੀਕ ਹੀ ਕਰਦਾ ਹੈ? ਜੇ ਹਾਂ - ਤਾਂ ਕੀ ਹਮੇਸ਼ਾਂ?

17. ਦੁਕਵਾਂ ਅਨੁਵਾਦ ਨਹੀਂ ਹੋ ਸਕਿਆ। (excluded)

18. ਦੁਕਵਾਂ ਅਨੁਵਾਦ ਨਹੀਂ ਹੋ ਸਕਿਆ। (excluded)

19. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ( ) ਨਾਲ ਕੁੱਛ ਚੰਗਾ ਹੋਏਗਾ ਕਿ ਬੁਰਾ?

20. ਹਾਥੀ ਪੁਛਦਾ ਹੈ, ( ) ਵੱਡਾ ਹੋ ਕੇ ਕੀ ਬਣੇਗਾ?

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